

Resources for Policy Surveillance

*A report prepared for the
Centers for Disease Control and Prevention
Public Health Law Program*

PUBLIC HEALTH LAW RESEARCH:
Making the Case for Laws that Improve Health

Public Health Law Research is a national program of the Robert Wood Johnson Foundation

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Executive Summary

Scott Burris, JD
Professor, Temple University Beasley School of Law
Director, Public Health Law Research

Legal interventions merit study for their effectiveness and comparative effectiveness ... [A] system of surveillance could be developed and pilot-tested to track the progress of efforts to expand the geographic reach of effective policies and laws, and to identify unmet needs for policy development and advocacy strategies. Although the administrative and methodological task of such research is challenging, the committee asserts as a general principle the obligation of policymakers to study, to whatever degree possible, the potential ramifications of policies in any sector that could substantially affect the health of the public.

- Committee on Public Health Strategies to Improve Health; Institute of Medicine (2011).

Introduction

Law is one of the primary tools used in public health to promote healthier environments and behaviors. Governments at all levels use statutes, regulations and other policies, often in innovative ways, to make our communities healthier and safer.¹ The effective and efficient use of law as a public health intervention depends upon research to evaluate what works and what does not, and diffusion of information to speed the adoption and implementation of laws that improve health.² The name “Legal Epidemiology” is apt for this public health law work, capturing both its importance and its scientific nature. Legal epidemiology may be defined as “the scientific study of law as a factor in the cause, distribution and prevention of disease in a population.” Within legal epidemiology, “policy surveillance,” the systematic tracking of policies of public importance, is an emerging practice that supports both scientific evaluation and the diffusion of policies the work for health. The Robert Wood Johnson Foundation’s Public Health Law Research program (PHLR), working in collaboration with the Centers for Disease Control and Prevention’s Office of State, Tribal, Local, and Territorial Support (OSTLTS), ChangeLab Solutions*, The Network for Public Health Law, the Public Health Law Center, and many expert volunteers, has undertaken a series of research and consultation projects intended to advance the understanding and practice of legal epidemiology at CDC and state, local and tribal health agencies, with special focus on policy surveillance.

In this summary, we describe the emerging concept of legal epidemiology, policy surveillance’s place within that framework. We begin with a brief discussion of the

* Work on this project has been funded by a subcontract between PHLR and ChangeLab Solutions, under CDC Collaborating Agreement Number CDC-RFA-OT13-1302. The views expressed in this report and its chapters are those of the authors and not the CDC, the Robert Wood Johnson Foundation or ChangeLab Solutions.

concept of legal epidemiology, including policy surveillance, and its relationship to traditional public health law. We then summarize and discuss results of the research projects, full results of which accompany this document:

- [*A Scan of Explicit Legal Recommendations in Federal Guidance Documents*](#), to document the important place of law in the nation's health strategies;
- [*A Scan of Existing 50 State Survey and Policy Surveillance Resources*](#), to describe the current investment in legal monitoring, and the state of the art;
- [*Criteria for Selecting Policies for Surveillance: Recommendations of an Expert Committee*](#), to provide initial guidance to decision-makers on the wise use of limited legal monitoring resources;
- [*Technical Standards for Policy Surveillance and Legal Datasets: Report of a Delphi Process*](#), to define consensus expert standards for the conduct of scientific legal surveillance; and
- [*Policy Surveillance Competencies \(1.0\)*](#), embodying the expert standards in measurable workforce capacities.*

Together, these resources provide a foundation for building a stronger, transdisciplinary practice of public health law. This Summary will conclude with discussions of the public health law research agenda and future directions for legal epidemiology. Suggested next steps include:

- Conducting/funding policy surveillance in strategically chosen domains to refine standards and build capacity
- Convening current providers of policy surveillance to build consensus on methods and explore synergies in building and sharing data
- Developing a virtual catalogue of available surveillance and legal survey resources
- Opening discussions on local and international level policy surveillance needs with key stakeholders
- Reflecting on strategies and institutional structures to enhance legal evidence assessment and translation in federal health guidance
- Developing a plan to systematically identify major gaps in the evidence base for legal prevention and control

* The project also produced "A Technical Guide for Policy Surveillance" (1.0), embodying the expert standards in a practical guide. This Guide is not included in this monograph but is available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2469895.

Public Health Law 2.0 and Policy Surveillance

For more than a century, public health lawyers have brought technical legal expertise about the law to public health.³ They have conducted legal research, drafted laws and regulations, advised health officers, and litigated in the public's interest. Though it has enjoyed something of a renaissance in the past three decades, public health law work has changed very little in its fundamentals: it has continued to consist of building and applying normative frameworks that can guide decisions, mapping and interpreting legal doctrine, and putting legal expertise into practice in legal advocacy and other professional legal work. Meanwhile, another mode of public health law was evolving in empirical research. By the end of the last century, law had become one of the very most important tools for public health, and scientific researchers had evaluated its impact.⁴ These researchers, and apparently even the lawyers they worked with, didn't necessarily think of what they were doing as "public health law." It was research about the impact of laws on health. Although some self-identified public health lawyers were also doing scientific evaluations,^{5,6} and both CDC and NIH were funding such work, there were only limited efforts to firmly and explicitly link these two expressions of public health law.

A systematic effort to bring public health law evaluation work within an explicit public health law framework began in 2009, when the Robert Wood Johnson Foundation created the Public Health Law Research program.⁷ PHLR's mission was to build a distinct identity for the scientific study of the impact of law and legal practices on public health.⁸ Through funding, methods support and intellectual leadership to define the field, PHLR aimed to harvest the benefits of uniting researchers studying law in different realms of public health under one banner: sharing knowledge across topical silos, an increased focus on developing theory and methods for studying legal influences on health, a greater profile and more resources for legal evaluation. The impetus was further enhanced by the renewal of the CDC's public health law program under Thomas Frieden, which undertook to strengthen the scientific basis of its work and its fit with the scientific culture of CDC. RWJF's influence was also at work in the convening of an IOM panel in 2010 to consider the state of public health law,² and the creation of several other major public health programs, including the Network for Public Health Law.

We propose calling this scientific facet of public health law "legal epidemiology," and define it as "the scientific study of law as a factor in the cause, distribution and prevention of disease in a population." Within that, we identify three component elements:

- *Legal etiology*, the study and amelioration of laws and legal practices as causes of disease and disease risk.
- *Legal prevention and control*, the study and application of laws and legal practices as interventions to prevent and control disease, and as enablers of public health administration.

- *Policy surveillance*, the scientific tracking of policies important to health.

Legal prevention and control encompasses the oldest and best developed domain of legal epidemiology. The scientific literature is rich with studies evaluating the impact and implementation of interventional public health laws, or studying the factors that influence the enactment of health laws.⁴ This domain of legal epidemiology includes the empirical study of laws establishing the powers, duties and jurisdiction of health agencies law in the Public Health Systems and Services Research tradition.^{8,9} Competency to conduct and apply research in this domain is essential for the proper use of law to promote safer environments and behaviors, to assure that health agencies have an optimal legal design, and that their powers are being properly wielded.

Legal etiology is a less developed concept and field, but is, if anything, of even greater long-term importance. It is the study of what might be called law's incidental or unintended effects, including its structural role in shaping the level and distribution of health in a community.^{2,8}[p. 9] Addressing "social determinants of health" offers a huge opportunity to make progress on improving the level, and especially the distribution, of health.¹⁰⁻¹² Law, as a basic set of institutions, rules and practices organizing social activity, is an obvious target for action.^{13,14} As the IOM put it,

"The health of a nation is shaped by more than medical care, or by the choices that individuals make to maintain their health, such as quitting cigarette smoking or controlling diabetes. The major contributors to disease—risk factors under the control of individuals (e.g., obesity, tobacco use), exposure to a hazardous environment, or inadequate health care—are themselves influenced by circumstances that are nominally outside the health domain, such as education, income, and the infrastructure and environment that exist in workplaces, schools, neighborhoods, and communities.²[p. 73]

Surveillance in public health is the means by which people who are responsible for preventing or controlling threats to health get the timely, ongoing, and reliable information they need about the occurrence, antecedents, time course, geographic spread, consequences, and nature of these threats among the populations they serve.¹⁵ "Policy surveillance" is the ongoing, systematic collection, analysis and dissemination of information about laws and other policies of health importance.¹⁶ The rationale for policy surveillance is clear: If law matters to health, public health officers, policymakers and researchers need basic information about what the law requires and where it applies. If the impact of law is to be empirically assessed, the law under surveillance must be measured in a way that creates data for evaluation. This entails scientific methods of (usually) quantitative coding,¹⁷ but also the collection of longitudinal legal data, given that the most robust evaluation designs require variation in time as well as space.¹⁸ The use of scientific coding procedures, combined with modern information technology, allows the efficient publication of digitized data to the Internet. Publication supports the rapid

diffusion of policy information to health professionals, policy makers and the public. The adoption of policy surveillance as a standard practice of public health, which the IOM has encouraged,² will bring a traditional legal practice into line with how public health monitors other phenomena of interest.

Figure 1 depicts the union of traditional public health law practice and legal epidemiology as a rich, multi-disciplinary enterprise, each element of which is in place and performing important functions now. In the remainder of this Summary, we discuss current practice and introduce tools and standards for its enhancement.

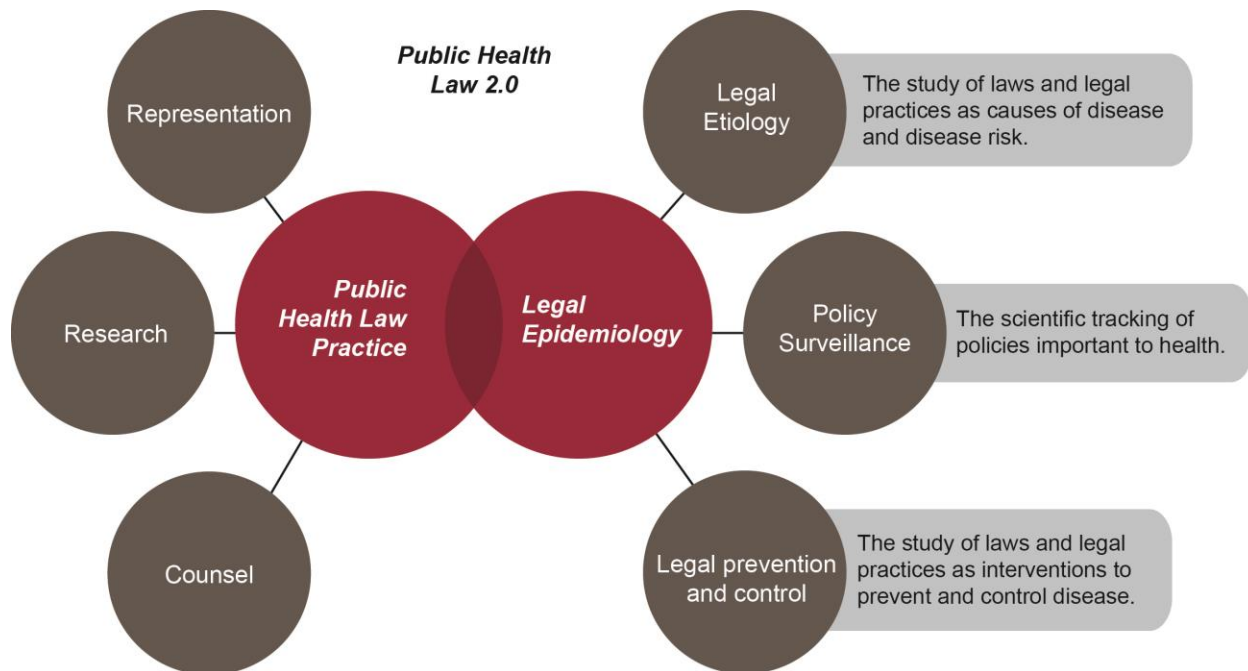


Figure 1

Key Findings from the Individual Projects

To What Extent and How Clearly Does Federal Health Guidance Identify Priority Policies and their Evidence Base?

The Department of Health and Human Services and the Centers for Disease Control set goals and make recommendations to improve public health through a variety of initiatives. A basic measure of law’s importance to public health is the extent to which it

appears in these resources. The clarity, specificity, and rationale for each recommendation is a good initial measure of how well our national agencies are able to integrate law into public health guidance. We reviewed Healthy People 2020, The Guide to Community Preventive Services, Winnable Battles, and Prevention Status Reports to identify instances in which laws, regulations or enforcement actions were suggested as means of achieving health goals, or as goals for public health progress in themselves. Overall, we observe that legal interventions are an important part of national public health plans, but that the degree to which legal interventions are recommended, and the clarity of those recommendations, varies across communications platforms and health topic areas for reasons that are not apparent.

One hundred and four distinct legal interventions were identified across the four sources. They addressed a wide spectrum of national health concerns, including tobacco, mental health, obesity prevention, urban planning, vaccinations, health-care acquired infections, education, HIV/AIDS, Medicaid expansion, prescription drugs/accidental overdose, alcohol use, child care/safety, crime prevention, vehicle and bicycle safety, and food safety/nutrition.

WHERE LAW APPEARS – AND DOES NOT

Healthy People 2020 is intended to be a comprehensive statement of the nation’s health goals. It is compiled by a careful process of evidence review and expert input. Healthy People 2020’s objective selection process entails the application of eight different criteria through three different workgroups/committees and a public comment process.^{*} As to law, the results are uneven across topics. Sixty-seven objectives mention law in the target-setting method, data or technical specs. In many if not most of these, the reference to law consists of “Maintain consistency with national programs, regulations, policies, and laws” rather than a mention of a specific law or type of law that a stakeholder would be advised to adopt, enforce or monitor. Out of more than 1,200 objectives and sub-objectives, only 36 explicitly set the enactment of a law as an objective. Explicit legal interventions are set out in tobacco, environmental health, injury and violence prevention, nutrition and weight status, physical activity, and substance abuse. This leaves 14 topic areas without legal action as an explicit objective,[†] including

^{*} Eight criteria were applied by the different workgroups and in public comments on the draft objectives. The objectives must: 1. Be important and understandable to a broad audience, 2. Be prevention oriented and/or should address health improvements, 3. Drive actions that will work toward the achievement of the proposed targets, 4. Be useful and reflect issues of national importance, 5. Be measurable and should address a range of issues, 6. Have continuity and be comparable year-to-year, 7. Be supported by the best available scientific evidence, and 8. Address population disparities. See <http://www.healthypeople.gov/2010/hp2020/Objectives/selectionCriteria.aspx> for more information.

[†] The topics without objectives explicitly calling for legal intervention include access to health services, adolescent health, disability and health, educational and community-based programs, family planning, food safety, immunization and infectious diseases, maternal, infant, and child

areas where law plays a notable role, such as vaccination.¹⁹ The tobacco case is striking. Twenty-six of the 36 explicit legal objectives are tobacco-related laws, and these comprise almost half of all the tobacco objectives. No other topic area, including areas where law has and continues to play a strong prevention role, is this clear and unambiguous in its legal guidance.

The variability between Healthy People 2020 topics with respect to frequency and specificity of legal interventions has no immediate explanation. It is not as simple as a lack of evidence. For example, while numerous tobacco interventions with a solid evidence base are mentioned, the only alcohol/crash policy mentioned is ignition interlocks, while other alcohol/crash-related legal interventions validated by the Guide to Community Preventive Services, like dram shop laws²⁰ and higher alcohol taxes,²¹ are omitted. It is easy to suggest that political considerations (or just perceptions of “political reality”) influence the frequency and clarity of legal recommendations, but that seems unlikely in these instances, because Winnable Battles features alcohol taxes and Prevention Status Reports highlight dram shop laws. It is just as plausible that the variation reflects differences in attitudes towards law within different professional silos, or is just an accident of the objective-building process. Whatever the reason, the variation suggests that it would be worthwhile to initiate discussions within HHS and among stakeholders about a more transparent, systematic, and consistent approach to identifying important health policies with the potential to enhance progress towards Healthy People goals.

None of the other three sources we examined purport to be comprehensive across health domains. The Community Guide’s topical choices are presumably dictated primarily by availability of evidence suitable for a systematic review. Interventions are identified and selected by a coordination team conducting the review.* (This makes Community Guide review ultimately dependent on funding for evaluation research, so the Community Guide’s list of evaluated legal interventions serves inversely as an indicator of areas where greater investment in research is needed.)

There is inconsistency within and across the four sources in the clarity with which the legal intervention is specified. Overall, stakeholders looking for guidance on tobacco control, reducing vehicular injuries and the toll of alcohol abuse will find many specific options for legal action. In other topics, the guidance tends to be sparse. The Healthy People 2020 website supports searches for objectives that can be advanced by “legislation” or implemented by “policymakers and law enforcement.” Most of the

health, medical product safety, mental health and mental disorder, oral health, preparedness, public health infrastructure, and respiratory diseases. See table A2 in the accompanying report titled “[A Scan of Explicit Legal Recommendations in Federal Guidance Documents](#)” for more information.

* See “Systematic Review Methods.” Available at <http://www.thecommunityguide.org/about/methods.html>. Last accessed July 7, 2014.

objectives returned by these searches, however, could be accomplished by many means other than law, and, more to our point, the legal means of accomplishing them are neither self-evident nor specified.* Politics is presumably at work in the lack of guidance on gun control laws, both directly and indirectly through a lack of a deep evidence base. Such topics are outnumbered, however, by the many areas, ranging from youth sports concussion to prescription drug overdose, where policymakers across party lines and key stakeholders seem eager to take action, and would presumably welcome expert public health input.

There is also a time-lag related to innovation that may be keeping legal guidance out of federal recommendations. Health officials and researchers are the scientific experts, but much of the innovation in legal prevention and control begins with local, state and federal policy makers, who necessarily act to respond to problems without evidence of how well their innovations will work.²² It is prudent for national experts to treat prevention innovation with caution in making recommendations. At the same time, the gap between policy action and scientific advice points to the important role of national health agencies in identifying and expeditiously evaluating important innovations in legal prevention and control, so as to make best use of federal guidance as a means of diffusing successful measures

BASIS FOR RECOMMENDATION

Consistent with the fundamental values of public health practice, the recommendations in all these sources of guidance are explicitly or implicitly based on research evidence, expert opinion or both. Their credibility depends to a considerable degree upon their transparency, which allows the user to assess the nature and strength of the evidence. The Community Guide is, axiomatically, very strong in this respect, since it only recommends interventions that have passed a stringent scientific test. Healthy People 2020 provides links to pre-set searches in PubMed, but not for all objectives. Legal interventions identified in Winnable Battles come from a variety of sources. Presumably the strength of expert recommendations and whether the intervention has a strong basis of success are controlling factors for its inclusion, but the Winnable Battles webpages do not uniformly explain the source of legal recommendations or provide prominent links to the underlying evidence. Interventions tracked in the Prevention Status Reports are selected explicitly based on whether they were recommended in a systematic review (such as the Community Guide), are cited in a national strategy or action plan (e.g., Healthy People 2020), or are recommended by a group of independent experts (like the

* For example, a search on “policymaker and law enforcement” or “legislation” will return IVP-6, “Increase the proportion of States and the District of Columbia with statewide emergency department data systems that routinely collect external-cause-of-injury codes for 90 percent or more of injury-related visits.” No guidance is provided on legislative, regulatory or law enforcement means that are now being used, or could be used, to advance this objective, nor whether non-legal means (or simply funding) would be more expeditious.

Institute of Medicine).^{*} The sources are typically clearly identified and linked directly to the intervention they are meant to support.

STATUS OF ADOPTION

If adopting a law is a goal, or an important means to achieving a goal, it follows that the status at baseline and over time is an important indicator of progress. The field of public health generally values the insight and accountability that comes from tracking progress. The Community Guide does not purport to track adoption of laws or regulations. Winnable Battles provides anecdotal information about the enactment of certain legal interventions, most often as examples to support the use of law as a tool in public health. Prevention Status Reports do provide information about adoption, and do so reasonably well within the limits imposed by a lack of data and non-standardized sources of policy surveillance. The reports uniformly link to a source of legal status information, but some of these are not up-to-date. Healthy People 2020 also tracks the enactment of laws through a variety of sources, including West Law, interest group policy surveillance resources, and government maintained policy surveillance portals. Inconsistency here highlights the difficulty of finding current and reliable policy surveillance resources.

CONCLUSIONS

All four of the sources we examined serve an evidence translation function. They are meant, in whole or in part, to help national, state and local stakeholders identify important goals and the means to achieve them. The clearer and more credible the recommendation, the better the recommendations may be taken up and progress tracked. There is no general reason for legal interventions to be less clear, their basis to be less well described, or their progress to be less documented than other modes of intervention. To be sure, the imperatives of effective communication vary for each kind of document: Winnable Battles, for example, was created more to engage and mobilize action in well-understood areas than to serve as a compendium of evidence. Political considerations may also shape policy recommendations: Health officials undeniably face pressure on certain hot-button regulatory issues, and are loath to be accused of “nannyism.” It is not clear, even in these cases, that avoiding or ambiguating legal recommendations is the best course of action, since in the end this is all just advice, and taking action will remain the province of elected officials. More importantly, many if not most realms of public health concern, and many if not most legal interventions, are not particularly controversial.⁴ In those matters, policy makers and the public actually want good advice about what works and what doesn’t, and effective evidence translation demands that such advice be given.

^{*} See “About the Prevention Status Reports PSR 2013”. Available at <http://www.cdc.gov/stltpublichealth/psr/overview.html>. Last accessed July 7, 2014.

What Policy Surveillance and 50 State Survey Resources Are Available Currently?

PHLR conducted a scan of existing policy surveillance resources. Based on our Delphi study discussed later in this summary, we define a fully functional policy surveillance resource as one that 1) maintains up-to-date legal information*, 2) provides access to the legal text, and 3) makes the results of the policy surveillance available as data for download. As policy surveillance is an emerging practice, we were also interested in assessing the extent to which important health law information was available in other formats, including traditional 50-state legal surveys. Using a series of Google searches, we examined more than 10,500 search results created since January 1, 2010 for policy surveillance resources.

The Alcohol Policy Information System (APIS), the State Tobacco Activities Tracking & Evaluation (STATE) System, and LawAtlas were the portals that fully met the criteria for a policy surveillance resource.† APIS contains surveillance conducted on 33 different alcohol related laws on topics including taxation, pregnancy and alcohol, blood alcohol concentration limits, and retail sales. APIS also shows changes in the law at a glance, allowing users to rapidly see trends.‡ STATE contains surveillance on smoking related laws. STATE's legal information is provided by CDC's Office of Smoking and Health.§ Users can build custom reports, compare states, and even view interactive maps. LawAtlas covers a variety of public health law topics, including laws on water quality, child safety restraints, medical marijuana, anti-drug overdose and more.

Ten resources were found that are regularly updated and either provide access to legal text, or contain legal data for download, but do not do both. These include another policy tracking database from CDC, the Chronic Disease State Policy Tracking System, and the Insurance Institute for Highway Safety's crash-related law resource, among others. Nineteen portals track changes in the law for the domains they survey, but do not provide access to legal text or downloadable data. These 29, together, are the product of

* A resource is considered current if it was updated within three months of the time of the scan or if it specifically lists an interval of time when it is updated (e.g., once a year, once every two years, etc.).

† We also included the National Cancer Institute's Classification of Laws Associated with School Students (CLASS) in this category, with qualifications. CLASS monitors and categorizes laws across the United States related to nutrition and physical education. The site provides data on the law, briefs, interactive maps, and allows users to create and print custom tables analyzing laws in jurisdictions they choose. It does not provide links to the legal text, but citations to the text may be downloaded as part of its data offering. It is updated, but only every two years.

After our research ended, the Guttmacher Institute updated its website, and now clearly meets all the criteria of a full-service policy surveillance portal. See <http://www.guttmacher.org/datacenter/>, visited July 11, 2014.

‡ See "Policy Changes at a Glance". Available at http://alcoholpolicy.niaaa.nih.gov/APIS_policy_changes.html. Last Accessed July 7, 2014.

§ See "Data Source / Methodology". Available at http://apps.nccd.cdc.gov/statesystem/help/help_methodology.aspx#LEG. Last Accessed July 7, 2014.

significant effort and other resources. The lack of uniformity in standards and practices, from legal research to data delivery, suggest an opportunity for CDC, PHLR and others to support harmonization and the efficiencies and opportunities for wider use of the data that standard methods could afford.

There are 135 policy surveillance resources that meet one of the policy surveillance criteria, but that are not updated regularly or at all. Many provide useful snapshots or characterizations of the law, but cannot be as fully trusted for accuracy in describing current law. However, the interest and willingness to conduct policy surveillance is notable. Advocacy groups are common providers of this information, presumably because tracking and publishing the information is deemed important to diffusing innovation, informing policy processes, or engaging stakeholders. Nine of the surveillance pages in this group were created by CDC, evidently in connection with broader projects in which law plays a role or in which legal support was needed by state, tribal or local health departments, such as the prevention of drug overdose or the provision of partner-delivered therapy for sexually transmitted infections.

Recommended Criteria for Selecting Policies for Surveillance

Given the significant resources required to conduct policy surveillance, it is necessary to make choices about what laws to monitor. PHLR convened a meeting of policy surveillance and public health experts to craft a set of criteria that would serve as a framework for deciding what policies merit surveillance. The criteria identified were:

1. Significance of the health problem targeted by the law or policy
2. Policy salience (i.e., the extent to which the legal intervention is under active consideration by policy makers)
3. State of evidence the base (i.e., whether the intervention is innovative and requires evaluation, or is proven effective but still not widely adopted)
4. Whether the law is an identified national priority
5. Cost of conducting the policy surveillance

These criteria represent an initial attempt to provide explicit guide posts for future, more conscious and systematic investment in policy surveillance.

Technical Standards for Policy Surveillance

We conducted a Delphi survey to define technical standards to guide and standardize the practice of policy surveillance. The full results of the Delphi are in the accompanying chapter titled "[Technical Standards for Policy Surveillance: A Report of a Delphi Process.](#)" The results of this Delphi were also used to create a technical guide on how to conduct policy surveillance.

We found broad agreement on processes like quality control in research and coding of the law, basic features of a legal dataset, and the use of experts to conceptualize the scope of what a legal dataset would cover. Overall, scientific processes are well received and proved to be integral to the creation of an accurate, complete legal dataset. Datasets should also be accompanied by supporting documentation that explains in detail the process by which the policy surveillance was conducted, the variables and coding scheme, and, most importantly, how the research was conducted. Without these key elements, a dataset cannot be duplicated by independent researchers. The final product must be produced as data, freely available and translatable into a variety of formats so that evaluation of the impacts of the law can be conducted.

The technical guide, titled “A Technical Guide for Policy Surveillance” does not accompany this report but can be found [here](#). We describe a process of creating a legal dataset based on the technical standards discussed above. This guide contains detailed instructions, best practices, and, in some circumstances, models of documents and processes that may be useful for a team conducting policy surveillance.

Our findings in the accompanying chapters echo many findings of a recent publication commissioned by CDC and the National Network of Public Health Institutes.²³ The report, *Local Policy Database Environmental Scan*, surveyed users of and experts on policy databases containing local, community-focused policy information. The authors reported that non-standardized, topically siloed policy database structures have created a complicated patchwork of tools for public health practitioners. A lack of consensus on everything from basic features of a policy database to informatics and ontological features creates a potentially wasteful allocation of resources, findings we echo here.

Policy Surveillance Competencies

Using the findings on technical standards for policy surveillance, we also crafted a series of competencies that staff conducting policy surveillance should possess. These competencies are a basic adaptation of the technical standards and attempt to outline the key roles and activities that must be carried out. As policy surveillance is an emerging field, we expect these competencies will be refined and validated over time.

Nine competency statements were derived from the Delphi standards:

- Determines the scope of a legal dataset through iterative research, analysis, and expert consultation.
- Engages and interacts with a domain expert who will assist in scoping a legal dataset.
- Incorporates a domain expert's knowledge and recommendations into the scope and coding scheme of a legal dataset.
- Conducts legal research for a legal dataset using a specified search strategy.

- Retains and organizes legal text during the research phase.
- Conducts coding within an explicit quality control plan to ensure the accuracy of legal research.
- Regularly meets to review divergent research results and ensures the scope of the legal dataset is correct.
- Creates and employs an explicit quality control plan to ensure the accuracy of legal coding.
- Regularly meets to review divergent coding results and ensures the scope of the legal dataset is correct.

The competencies reflect activities like conducting, managing, and creating the quality control processes; interacting with, finding, and evaluating a domain expert; and conducting and evaluating legal research and legal coding. We attempt to outline multiple levels of responsibility, from the entry level, to manager, and to director.

Future Directions: Policy Surveillance, Legal Epidemiology and the Research Agenda for Public Health Law

There is a gap between the important role of law in public health and the degree to which legal functions have benefited from a systematic, scientific approach. Despite bright spots of outstanding scientific work, and a significant investment of resources, monitoring and evaluation of public health law are often short on rigor, coordination, and standardization. This is, properly viewed, a huge opportunity. By bringing law squarely within the normal scientific standards of public health, using available resources more effectively, and investing wisely in gap-filling research and evaluation, it will be possible to provide the public, health officers and policy-makers with better, clearer and more impactful public health law guidance.

Seizing the opportunity probably requires new organizational structures and capacities. While it is almost certainly *not* desirable to create a new institutional silo for law work, it may be useful to conclude with thoughts about the kinds of functions that must be performed in some structure to instantiate public health law 2.0. In the domain of Policy Surveillance, we have suggested in this Report that when the government issues guidelines and recommendations for public health laws, it generally should

1. clearly identify the legal or regulatory action;
2. clearly identify the evidence base on which the recommendation rests; and
3. have in place a surveillance plan to monitor the adoption of the recommended action and support further evaluation of its impact.

Making this a standard practice depends upon the four functions that must be performed somewhere in the public health system. These functions, and suggested next steps, are:

- **The conduct of surveillance**
 - ➔ It will be useful as a test to apply the criteria we have identified for selecting domains to select priority topics for surveillance, and to support active surveillance in such domains. For example, where new or existing Prevention Status Reports address legal interventions that satisfy the criteria but are not subject to surveillance, datasets tracking the status of those interventions could be built and published.
- **Standard setting for optimal utility, validity and credibility of policy surveillance**
 - ➔ The process of developing agreed upon standards could be advanced by further convening and consensus building around the criteria and technical standards derived from our work with experts. A meeting bringing together key personnel involved in the APIS, CLASS, LawAtlas, STATE and other CDC surveillance portals is an obvious next step.
- **The provision of “clearinghouse” services to maximize accessibility of scattered policy surveillance and survey resources**
 - ➔ The scan of policy surveillance and 50-state resources reported here shows that there is an abundance of potentially useful public health legal information available to anyone with an internet connection. An obvious next step would be to further assess these resources, and make those that are salient and reliable more accessible through a virtual catalogue maintained at CDC or other appropriate source, such as PHLR or the Network for Public Health Law.
- **Technical assistance and capacity building**
 - ➔ The creation of a draft technical guide and competencies is an important step forward in capacity building and technical assistance. The development of policy surveillance competencies may be integrated into the ongoing process of developing other public health law competencies. It is also worth considering whether collecting and coding key policies could be integrated into legal training and capacity building as an experiential exercise allowing public health professionals to learn law by doing. Local health officials have identified a need for information about policies adopted in peer jurisdictions; health agency accreditation standards require applicants to maintain awareness of their health policies^{*}; at least one county health department has used policy surveillance tools and techniques to capture local policy information.[†] Discussions to create pilot local surveillance projects could begin with ASTHO, NACCHO, and tribal health agencies. Similar

^{*} See Standard 5, Public Health Accreditation Standards, Version 1.5 (2013), available at <http://www.phaboard.org/wp-content/uploads/SM-Version-1.5-Board-adopted-FINAL-01-24-2014.docx.pdf>, visited July 11, 2014.

[†] See <http://www.kingcounty.gov/healthservices/health/data/PolicyTracker.aspx>, visited July 11, 2014.

discussions may also be useful at the global level, with partners like CDC's Global AIDS Program and the World Health Organization.

The work reported here has focused primarily on policy surveillance, but it has implications for the better practice of Legal Etiology and Legal Prevention and Control. In this realm, this work and PHLR's general experience suggests that essential functions and next steps include:

- **Public health law evidence assessment and translation**
 - ➔ The public and policy makers look to public health professionals for advice on the effective use of legal powers to protect health and prevent harm. We can do a better job in terms of accessibility, clarity and consistency. We can be more systematic in reviewing and translating existing evidence into helpful form and accessible media. The Prevention Status Reports offer a model of translation tools that clearly describe the legal intervention, its evidence base, and the status of adoption. A new collaboration between RWJF, the CDC Foundation and federal health agencies will be exploring effective ways to convey policy recommendations in Healthy People 2020.* This project offers a forum for further discussion and learning about evidence assessment models and communications approaches suitable for the often rapidly changing realm of policy.
 - ➔ There seems to be growing interest in evidence assessments that can unfold in a timeline better synchronized with the realities of policy. These include Health Impact Assessment (research proceeding policy) and evidence assessment and impact evaluation tools that use evidence that would not qualify for a systematic review but that nonetheless can shed light on "promising" policies (i.e., tested by relatively less rigorous and preliminary research) and even "emerging" strategies (i.e., newly implemented and with high face validity, but not yet subject to evaluation research).²⁴ These tools are ready for wider adoption and further refinement, which could be undertaken as an adjunct to policy surveillance, so that both the evidence base and the current state of adoption of emerging policies can be scientifically assessed.
- **Developing a public health law research agenda**
 - ➔ Evaluation research to create the evidence base for action is fundamental to legal epidemiology, as it is in all aspects of interventional public health. The wise use of scarce research funding requires criteria for prioritizing research questions. The criteria suggested for policy surveillance in this Report would, broadly, serve to identify important research questions for public health law. As our scan of federal recommendations suggested, however, more

* See <http://www.rwjf.org/en/about-rwjf/newsroom/newsroom-content/2014/03/robert-wood-johnson-foundation-funds-new-healthy-people-2020-law.html>. Visited July 11, 2014.

- groundwork has to be laid before a national public health law research agenda can begin to be assembled.
- ➔ An assessment of the existing evidence base across the range of ways law is being used for public health would be a good start. The Community Guide (as well as the Cochrane and Campbell Collaborations) provide recommendations that are amply supported by carefully researched and written evidence reviews. These are primarily relevant to a research agenda in showing where more research may NOT be urgently needed. These reviews cover only half the policy priorities identified in our scan, most of which have been widely enacted already. Innovations may have no direct evidence and many newer interventions will have been subject only to implementation research or to evaluations using less rigorous observational designs, and over short time periods.
 - **Technical assistance and methods support**
 - ➔ As policy surveillance and evaluation research become more common, it will be useful to consider how expertise and rigor can be supported. Legal capacity building has largely focused on public health law practice. PHLR has provided methods and research technical assistance for the past five years, but it is a time-limited program. It will be useful to begin a conversation about how to sustain these functions in the national public health infrastructure.
 - **Research funding**
 - ➔ There is too little evaluation of law's impact on health, and too much delay in evaluating important innovations, yet areas like tobacco and alcohol show that rigorous evaluation of law is possible and is useful to policymakers. A broader discussion of why this situation persists is indicated.

This chapter has highlighted the many sources of guidance on the use of law in public health, but also the evident challenges in maintaining surveillance of important public health laws and linking stakeholders to the evidence. Overall, law is serving a valuable role, and there are immediate opportunities to enhance standards of legal epidemiology.

A Scan of Explicit Legal Recommendations in Federal Guidance Documents

David Presley, JD
Policy Surveillance Manager, Public Health Law Research

Scott Burris, JD
Professor, Temple University Beasley School of Law
Director, Public Health Law Research

Introduction

This chapter describes the results of a research project growing out of discussions with a committee of experts on policy surveillance. This meeting was convened to define criteria for selecting policies for surveillance, and to discuss a research agenda for evaluation research in public health law.*

During the course of the surveillance discussions, the committee requested PHLR to identify legal interventions identified in major federal health recommendations. We reviewed four sources of health policy guidance — Healthy People 2020, Winnable Battles, the Prevention Status Reports, and the Guide to Community Preventive Services — to identify instances in which the enactment or enforcement of a law, regulation, binding policy or ordinance was recommended as effective or otherwise noted as instrumental to achieving a national public health goal. Our review included background and technical documentation and other material linked on the product websites.

The policies identified, and where we found them, are listed in Table 1 (See page 30). This table was created by combining the individual findings in the four scans. The language of each legal intervention in this table is, by default, that used in Healthy People 2020, because it most often provided precise language defining specific legal measures. Where a Healthy People 2020 objective was not present, or more than one other policy scan contained the same type of recommendation, the most clearly worded one was used.

In compiling the total, we combined recommendations that we deemed to cover the same legal ground, even if these were worded differently, and we omitted general recommendations in favor of specific ones. For example, we included several recommendations for smoke-free laws covering particular settings, and omitted the general recommendation to enact smoke-free laws. The legal intervention, not the recommendation in one or more sources, is thus the unit of analysis. The methods are described in detail below, and complete data tables for each scan are included in the [Appendix](#).

For each resource, we have offered a preliminary set of observations from the perspectives of public health law research and policy surveillance. In providing guidance or recommendations for the effective use of law in public health, the ideal resource would provide users with clear answers to three questions:

- What is the policy intervention and at what level of government should it be enacted?
- On what basis of evidence or expert judgment does it rest?
- Where has it been adopted to date?

* We would like to acknowledge significant contributions made to this chapter by Damika Webb Barr, JD, and Viren Doshi, JD/MPH Candidate, Earle Mack School of Law, Drexel University, 2015.

Overall, the results show that law is an important component of our national health strategy, but the resources reviewed here differ in how, and to what extent, they provide ready answers to these basic questions.

Legal Interventions in Healthy People 2020

In this section, we report on the scan of Healthy People 2020. Healthy People 2020 is an “ambitious, yet achievable, 10-year agenda for improving the Nation’s health [that] ... is the result of a multiyear process that reflects input from a diverse group of individuals and organizations.”* Among its goals are to “increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress,” and “[p]rovide measurable objectives and goals that are applicable at the national, State, and local levels.” Law arises in several ways in the product: passage or enforcement of a law may be an objective or “prevention area”; it may be a measure of an objective; or a law maker or enforcer may be a suggested “intervention agent” for achieving an objective even if no particular law or enforcement action is specified. In many instances, law or legal action is mentioned generally, but a specific law or action is not identified. For example, in a Google term search, the phrase “Maintain consistency with national programs, regulations, policies, and laws” appears 91 times as a target-setting method, but in the majority of those instances, no specific “programs, regulations, policies or laws” are identified. †

Methods

From the Healthy People website home page (<http://www.healthypeople.gov/2020/default.aspx>), “2020 Topics & Objectives” was selected. HealthyPeople.gov does not support free text searching of the objectives. Rather, it allows searches using pre-set criteria. On this Topics and Objectives page, the “Objectives Search” tab served as the starting point for two law searches. The first search was run by selecting *Policymakers and Law Enforcement as the Intervention Agent*.‡ In the second search, *Legislation* was selected as the *Prevention Area*.§ The search returns were classified as follows.

First, the researcher observed whether a law or enforcement action was explicitly mentioned in the objective. A “law” included a federal, state or local statute or ordinance, or a regulation; we also included mandatory policies of government entities such as school districts and of private

* <http://www.healthypeople.gov/2020/about/default.aspx>. Date accessed: May 9, 2014.

† This search was not part of our research protocol. The Healthy People 2020 website does not appear to support key word searches. As a check on our main protocol findings, we conducted a Google search to identify all Healthy People 2020 objectives where “Maintain consistency with national programs, regulations, policies, and laws” was indicated as the target-setting method. The Google search was limited to “www.healthypeople.gov/hp2020/” in order to limit all results to objectives contained within Healthy People 2020. Some search results link to individual objectives’ pages, while others link to PDFs which contain the same objectives, thus creating a potential for duplicate entries. The individual search results were then individually examined to eliminate any duplicate objectives, leaving 91 unique objectives with this target-setting method.

‡ <http://www.healthypeople.gov/2020/TopicsObjectives2020/topicsObjectivesSearchResults.aspx>. Date Accessed: March 17, 2014.

§ <http://www.healthypeople.gov/2020/TopicsObjectives2020/topicsObjectivesSearchResults.aspx>. Date Accessed: March 20, 2014.

employers. A law was “explicitly mentioned” if the objective specified a particular law or type of law, the application of a rule or policy was recommended to be “required” by a legal authority, or required legal enactment (tax or benefit change). If so, the record was coded as *law explicitly mentioned in the objective*.

If there was no explicit reference to law in an objective, the researcher examined the linked pages describing the target-setting method, measurement data and technical specifications for the objective. For purposes of this sub-routine, and in order to maximize sensitivity, an objective was deemed to mention law if these pages referred explicitly to “law,” “policy” or “regulation”, “law enforcement”, or “enforcement of law,” even if no specific law or legal act could be identified. If so, the record was coded *law/policy included in the target-setting method/data/tech specs for the objective*. Records were also coded as to whether they appeared in the returns for the *Policymaker and Law Enforcement* search return and/or *Legislation* search return. Developmental objectives were excluded from our analysis.* All coding was reviewed independently by a second researcher; inconsistencies were discussed and resolved by consensus.

A search of *Policymakers and Law Enforcement* yielded 326 results. One hundred seventy six results were returned from the *Legislation* search. After excluding the developmental objectives, the *Policymakers and Law Enforcement* searches returned 276 objectives and *Legislation* returned 120 objectives. These objective returns represent 20 of the 42 Healthy People 2020 topic areas. The lists were not mutually exclusive.

Discussion Points

There are 36 objectives that identify a specific legal intervention. Of these objectives, 26 are in the Tobacco Use topic area. The other mentions of law are in the Environmental Health topic area (Safe Drinking Water Act regulations), Substance Abuse (mandatory ignition interlock laws), Injury and Violence Prevention (bicycle helmet laws and graduated driver licensing), Nutrition and Weight Status (policies that incentivize food retail outlets to provide foods that are encouraged by the Dietary Guidelines for Americans, nutrition standards for food provided to preschool-aged children in child care, and requiring fruits and vegetables be available in school districts), and Physical Activity (licensing regulations for physical activity in child care settings).

Sixty-seven objectives mention law in the target-setting method, data or technical specs. In many if not most of these, the reference to law consists of “Maintain consistency with national programs, regulations, policies, and laws” rather than a mention of a specific law or type of law.† We included all objectives with this statement even though some objectives may use a program to achieve the goal. Tabulated results for this search are in the [Appendix](#) of this document.

* Developmental objectives do not have any baseline data. In addition, we found in a review of the developmental objectives that none explicitly mention law in the title of the objective.

† Note also that our related finding that 91 objectives use this phrase indicates that in at least 24 instances, this mechanism is not linked to either *Policymakers and Law Enforcement as the Intervention Agent* or *Legislation as the Prevention Area*.

Table A1 contains all objectives with explicitly mentioned policy or legal interventions. Tables A2 and A3 provide further details of the results.

The research confirms that law is an important part of our national health strategy, but also suggests that we could do a better job in consistently tracking progress, measuring impact and connecting policy makers, public health officials and the public to clear guidance on what works and how law can be used to promote safer environments and healthier behavior. Particularly in cases in which the enactment of a law is an HP 2020 goal, the cause would be well-served by allowing users to immediately ascertain the current level of and trends in adoption. Key findings include:

- Law represents an important component of the nation’s strategy to achieve its ambitious public health goals.
 - The treatment of the law in HP 2020 is inconsistent for unexplained reasons. It is not clear why detailed legal recommendations are made in some areas but not others; general references to legal action included in the supporting documents are frequently ambiguous as to what legal action is recommended to be taken by whom.
- The CDC State Tobacco Activities Tracking and Evaluation (STATE) System maintains surveillance of a wide range of tobacco control laws, and HP 2020 generally links users to those resources. Otherwise, links to surveillance resources such as CDC’s Alcohol Policy Information System (APIS) are absent or poor. In topic areas where surveillance has not been sustained or systematic, there may be no link to legal information or the link may take the user to outdated or unavailable sites. For example, SA-6, 6 “Increase the number of States with mandatory ignition interlock laws for first and repeat impaired driving offenders in the United States,” is supported by a broken link to Mothers Against Drunk Driving. (APIS does not maintain coverage of ignition interlock statutes.)
- All HP 2020 objectives are linked to pre-set PubMed searches that can retrieve relevant evidence. These searches do not uniformly produce user-friendly, specific results.* HP 2020’s explicit legal objectives do not direct the user to evidence briefs, evaluations, or evidence assessments in the same way the Guide to Community Preventive Services almost invariably does.
- Going beyond the policy surveillance and evaluation perspective, our review of law in HP 2020 suggests that decisions about when to recommend policies, on what basis, and in what terms are made inconsistently across the domains of action, and that a consistent, scientific approach to legal recommendations would enhance the clarity and usefulness of the resource.

* For example, a search on May 11, 2014 for PubMed resources supporting TU-13.1 (clean indoor air laws) produced 165,000 returns. On the first page of 20, none concerned clean indoor air laws. The first result on the list was entitled “Caterpillar locomotion-inspired valveless pneumatic micropump using a single teardrop-shaped elastomeric membrane.”

Legal Interventions in Winnable Battles

The committee asked PHLR to conduct a scan to identify legal interventions recommended or identified as important in federal health policy guidance. In this section, we report on the scan of Winnable Battles. Winnable Battles describes itself “as an effort to achieve measurable impact quickly in a few targeted areas.”^{*} Among its goals are to “make significant progress in reducing health disparities and the overall health burden” from a set of public health priorities “with large-scale impact on health and with known, effective strategies to address them.”[†] CDC has identified seven Winnable Battles areas in domestic health:

- Food Safety
- Healthcare-associated Infections
- HIV in the U.S.
- Motor Vehicle Injuries
- Nutrition, Physical Activity, and Obesity
- Teen Pregnancy
- Tobacco

Winnable Battles does not purport to feature legal interventions as a distinct focus, but law appears in two primary ways in the initiative. First, the main descriptions of each individual Winnable Battle sometimes contain recommended legal interventions. Second, the main Winnable Battles information pages and the related resources contain examples of past legal successes that could be implemented elsewhere.

Methods

Starting with the main landing page for the Winnable Battles site (<http://www.cdc.gov/winnablebattles/>), we visited each individual landing page for the different Winnable Battles initiatives. On each Winnable Battles page, we searched for the terms "law," "policy," or "regulation." The search was repeated on all linked resources, document, or other links (except videos) on the individual landing pages.

Our goal was to identify specific legal interventions recommended by or recognized as useful in the past in the Winnable Battles materials, including linked materials not branded as part of the Winnable Battles initiative. A “law” included a federal, state or local statute or ordinance, or a regulation; we also included mandatory policies of government entities such as school districts and of private employers. A law was “explicitly mentioned” if the Winnable Battles material or link specified a particular law or type of law, the application of a rule or policy was recommended to be or described as “required” by a legal authority, or required legal enactment (e.g., tax or benefit change).

The results were reviewed by a second researcher, and discrepancies were resolved by consensus. Because Winnable Battles does not purport to set out specific legal recommendations, references to legal interventions were rephrased in the results reported

^{*} See <http://www.cdc.gov/winnablebattles/>. Date Accessed: May 9, 2014.

[†] See <http://www.cdc.gov/winnablebattles/>. Date Accessed: May 9, 2014.

below for clarity and uniformity. The initial scan was conducted from March 12 to March 28, 2014. Supplementary scans were conducted from April 21 to April 30, 2014.

Discussion Points

We identified 41 legal interventions that satisfied our search criteria. HIV has references to reimbursement policies and treatment guidelines. The former were not specific enough to include and the latter referred to non-legal policies. Results are set out in Table A4 in the [Appendix](#).

The research confirms that law is given an important role to play in winning the Winnable Battles. References to policies that have been successful in the past, and to policies that could contribute in the future, are frequent and, in some instances, specific. In Motor Vehicle Injury, for example, law is clearly the primary recommended tool for action.* Specific types of laws are described in the materials and there are references to evidence of effectiveness. That said, Winnable Battles as a communications tool is not designed to list specific goals or recommendations in the manner of Healthy People 2020, to systematically set out or provide links to the evidence base for action, to in every case provide technical assistance resources (such as model laws or community engagement tools) or to track adoption of the legal and other interventions it describes. As a resource for policy makers and other stakeholders exploring action in these domains, a clearer identification of useful policy actions and their evidence base or other rationale would enhance its value. As with other government health recommendations and guidelines, tracking adoption of key policies could be a measure of impact for the initiative and a way to encourage diffusion of evidence based policies.

Legal Interventions in the Prevention Status Reports

The committee asked PHLR to conduct a scan to identify legal interventions recommended or identified as important in federal health policy guidance. In this section, we report on the scan of Prevention Status Reports. The Prevention Status Report (PSR) is a tool created by the Office of State, Tribal, Local, and Territorial Support that “highlight[s] — for all 50 states and the District of Columbia — the status of health policies and practices designed to address” important public health problems across ten broad topic areas. Among its goals are to pull together widely dispersed information that can be hard for decision makers to find and understand into a simple, easy-to-use format that can be used to examine a state’s status and identify areas for improvement.† The state of the law is an explicit component of Prevention Status Reports.

Methods

The landing page for each PSR was examined for references to specific legal interventions. Once recorded, the source of the recommendation was ascertained by examining the background information provided in the PSR. We also recorded the source of any legal mapping

* See PowerPoint Slides, available at <http://www.cdc.gov/WinnableBattles/MotorVehicleInjury/>. Date Accessed: May 11, 2014.

† <http://www.cdc.gov/stltpublichealth/psr/faq.html>. Date Accessed: May 9, 2014.

information provided about each legal intervention, and the date of the latest update cited in the PSR.

Discussion Points

Ten Prevention Status Reports were identified in 10 topic areas:

- Excessive Alcohol Use
- Motor Vehicle Injuries
- Food Safety
- Nutrition, Physical Activity and Obesity
- HAIs
- Prescription Drug Overdose
- Heart disease and stroke
- Teenage Pregnancy
- HIV
- Tobacco use

Specific legal interventions were not identified for HAIs and Food Safety. The remaining eight PSRs specified 22 types of legislative, regulatory or enforcement actions. The PSR format identifies one or more sources for an intervention, most commonly the Community Guide or HP 2020. The implementation of the PSRs' legal interventions is typically measured by examining changes in laws across the states. The sources used for this purpose ranged from a full-fledged policy surveillance system, APIS, through CDC-produced 50-state surveys and "Westlaw," to web-pages of other governmental or non-governmental organizations, such as the Insurance Institute for Highway Safety. Seven recommendations are not linked to a source of policy surveillance. (In one of these, concerning state PDMP laws, the recommendation is one of practice rather than the adoption of a law.) None of the PSRs were updated to the current year. In six of the cases, the underlying policy surveillance resources listed (APIS, IHHS, Kaiser Family Foundation) were current or updated to the current year.

Compared to Healthy People 2020 and Winnable Battles, the PSRs are most clearly designed to communicate guidance on legal and policy interventions in particular. The format makes it easy to identify the source of the recommendation, which can help the user get to supporting evidence. The Community Guide is itself a prime source of policy evidence. Healthy People 2020, as discussed above, does not necessarily provide users with efficient access to the evidence base. The PSRs are also formatted to quickly link the user to the current state of adoption of legal interventions. In practice, however, most of the references are to resources that are not up to date. This appears to reflect the absence of policy surveillance resources for the laws at issue.

Legal Interventions in the Guide to Community Preventive Services

In this section, we report on the scan of the Community Guide to Preventive Services. The Guide describes itself as a free resource to help people choose programs and policies that have

been proven to improve health and prevent disease in their communities.* Along with information about interventions that work, it also aims to help people avoid interventions that have been shown not to work, and to identify research interventions where the evidence base still does not support a confident judgment of effectiveness.† The Guide has evaluated a substantial number of legal interventions, which it rates as “recommended,” “recommended against,” or “insufficient evidence.” Within those recommended interventions, the Guide categorizes them as either “strong” or “sufficient” to reflect the degree of confidence in the interventions’ benefits.‡

Methods

All Guide to Community Preventive Services Task Force recommendations were examined individually for suggested legal interventions on April 14, 2014. Once recorded, the date the legal intervention was recommended for or against was recorded as well. If a recommendation was vague on whether it included a legal intervention, the recommendation was more carefully examined to determine whether a legal intervention might be a component of the recommendation. The sources of the legal interventions were not recorded because all Community Guide recommendations are based on transparent, systematic reviews of scientific studies.

Thirty individual legal interventions were identified. The recommendation dates varied widely, from as long ago as 1998 to as recently as 2013. More than half of the suggested legal interventions relate to either alcohol or tobacco use. Other domains with suggested legal interventions include obesity, community/environmental planning, oral health, mental illness, and the treatment of juveniles in the criminal justice system.

Discussion Points

- The Community Guide provides credible, detailed evidence to support policy recommendations.
 - The scientific standards necessarily limit the Community Guide’s advice to the best studied interventions, meaning that newer interventions, or interventions for which evaluation has not been adequate, are not addressed in this resource.
- The Community Guide does not track or provide links to information on enactment of the legal interventions it recommends.

* <http://thecommunityguide.org/index.html>. Date Accessed: May 9, 2014.

† <http://thecommunityguide.org/about/index.html>. Date Accessed: May 9, 2014.

‡ <http://thecommunityguide.org/about/categories.html>. Date Accessed: May 9, 2014.

Table 1 – Synthesized Table of All Legal Interventions Scan Results:

Explicit Legal Intervention	Healthy People 2020	Winnable Battles	Prevention Status Report	Community Guide for Preventive Services
Food Safety				
Enforce the Food Safety Modernization Act and regulations thereunder		X		
Adopt and enforce proven food safety laws and regulations		X		
Require that kitchen managers receive food safety certifications		X		
Track and assist with multistate foodborne illnesses/provide FDA with precise estimates of foodborne illnesses and deaths		X		
Require private food suppliers to conduct surveillance of deadly microbes		X		
Require more selective use of antimicrobials on farms based on evidence gathered by the CDC		X		
Add cut tomatoes to regulatory lists defining potentially hazardous substances		X		
Require meat grinding industry to adopt safety plans with rules like separating different meats to avoid potential cross contamination with deadly microbes		X		
Require the labeling of raw foods to alert consumers of potential contamination or infection		X		
Require meat inspection guidelines that include regular testing and monitoring for deadly microbes		X		
Include nontyphoidal Salmonella as a reportable disease for restaurant managers		X		
Update FDA’s Food Code with recommendations for exclusion and restriction of food workers diagnosed with foodborne illnesses		X		
Injury and Violence Prevention				
Require use of child safety restraints			X	X
Increase the number of States and the District of Columbia that link data on violent deaths from death certificates, law enforcement, and coroner and medical examiner reports to inform prevention efforts at the State and local levels	X			
Violence prevention: eliminate policies facilitating the transfer of juveniles to adult justice systems				X
Enact comprehensive graduated driver licensing (GDL) systems and parental monitoring	X	X	X	
Increase the number of States with mandatory ignition interlock laws for first and repeat impaired driving offenders in the United States	X	X	X	X

Table 1 – Synthesized Table of All Legal Interventions Scan Results:

Explicit Legal Intervention	Healthy People 2020	Winnable Battles	Prevention Status Report	Community Guide for Preventive Services
Deploy sobriety checkpoints		X		X
Increase state beer excise tax		X	X	X
Increase state distilled spirits excise tax		X	X	X
Increase state wine excise tax		X	X	X
Adopt seat belt laws that apply to everyone in the car		X	X	X
Adopt zero tolerance laws for drinking and driving		X		
Require the primary enforcement of seatbelt laws		X	X	X
Ensure that fines for not wearing a seat belt are high enough to be effective		X		
Increase the number of States and the District of Columbia with laws requiring bicycle helmets for bicycle riders	X			
Maintaining limits on hours of sale (alcohol)				X
Require 0.08% blood alcohol concentration (BAC) laws				X
Local authority to regulate alcohol outlet density			X	X
Preventing excessive alcohol consumption: enhanced enforcement of laws prohibiting sales to minors				X
Reducing alcohol-impaired driving: lower BAC laws for young or inexperienced drivers				X
Reducing alcohol-impaired driving: maintaining current minimum legal drinking age				X
Maintaining limits on days of sale (alcohol)				X
No privatization of retail alcohol sales				X
Enact and enforce state pain clinic law			X	
Prescription drug management programs following best practices			X	
Commercial host (dram shop) liability laws			X	X
Pharmacist collaborative drug therapy management policy			X	
Require universal motorcycle helmet laws				X
Tobacco				
Increase the proportion of persons covered by indoor worksite policies that prohibit smoking	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in private worksites	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in public worksites	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in restaurants	X	X	X	X

Table 1 – Synthesized Table of All Legal Interventions Scan Results:

Explicit Legal Intervention	Healthy People 2020	Winnable Battles	Prevention Status Report	Community Guide for Preventive Services
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in bars	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in gaming halls	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in commercial daycare centers	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in home-based daycare centers	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in public transportation	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in hotels and motels	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in multiunit housing	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in vehicles with children	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in prisons and correctional facilities	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in substance abuse treatment facilities	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in mental health treatment facilities	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in entrances and exits of all public places	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking on hospital campuses	X	X	X	X
Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking on college and university campuses	X	X	X	X
Eliminate State laws that preempt stronger local tobacco control laws on smoke-free indoor air	X	X	X	X
Eliminate State laws that preempt stronger local tobacco control laws on advertising	X			
Eliminate State laws that preempt stronger local tobacco control laws on youth access	X			

Table 1 – Synthesized Table of All Legal Interventions Scan Results:

Explicit Legal Intervention	Healthy People 2020	Winnable Battles	Prevention Status Report	Community Guide for Preventive Services
Reduce the illegal sales rate to minors through enforcement of laws prohibiting the sale of tobacco products to minors in States, Territories, and the District of Columbia	X			
Increase the unit price of tobacco products through tax increases	X	X	X	
Increase comprehensive Medicaid insurance coverage of evidence-based treatment for nicotine dependency in States and the District of Columbia	X			
Require insurance companies to cover the cost of tobacco-use treatment in health insurance plans		X		
Enact and enforce laws to limit minors' access to tobacco products	X	X		X
Enact and enforce the Family Smoking Prevention and Tobacco Control Act		X		
Enact and enforce the Prevent All Cigarette Trafficking Act		X		
Enact laws requiring CDC-recommended levels of funding for anti-smoking programs		X		
Nutrition and Weight Status				
Increase the number of States that have State-level policies that incentivize food retail outlets to provide foods that are encouraged by the Dietary Guidelines for Americans	X			
Adopt nutrition standards for food and beverages sold in schools	X	X	X	
Enact standards reducing sodium in government facilities and educational institutions		X		
State nutrition standards policy for foods and beverages sold or provided by state government agencies			X	
Increase the number of States with nutrition standards for foods and beverages provided to preschool-aged children in child care	X			
Increase the proportion of school districts that require schools to make fruits or vegetables available whenever other food is offered or sold	X			
Oral Health				
Requiring community water fluoridation				X
Maternal and Child Health				
Set statewide maternity care quality standards for hospitals to support breastfeeding		X		
Include breastfeeding in early care and education (ECE) licensing regulations		X		
Enact policies supporting breastfeeding in worksites		X		
Physical Activity				

Table 1 – Synthesized Table of All Legal Interventions Scan Results:

Explicit Legal Intervention	Healthy People 2020	Winnable Battles	Prevention Status Report	Community Guide for Preventive Services
Adopt policies that promote bicycling and increased use of public transportation		X		
Inclusion of nutrition and physical activity standards in state regulations of licensed childcare facilities	X		X	
Increase the number of States with licensing regulations for physical activity in child care that require activity programs providing large muscle or gross motor activity, development, and/or equipment	X		X	
Increase the number of States with licensing regulations for physical activity in child care that require children to engage in vigorous or moderate physical activity	X		X	
Increase the number of States with licensing regulations for physical activity in child care that require a number of minutes of physical activity per day or by length of time in care	X		X	
Requiring community-scale urban design and land use policies that increase physical activity				X
Creating enhanced access to places for physical activity combined with informational outreach activities			X	X
Requiring street-scale urban design and land use policies that increase physical activity				X
Requiring point-of-decision prompts to encourage use of stairs				X
Worksite obesity prevention programs like requiring employers to cover health club memberships or enhanced health insurance benefits that prevent obesity				X
Improve physical education laws in schools		X	X	
Access to Healthcare				
Expansion of state Medicaid family planning eligibility		X	X	
HIV/AIDS				
State Medicaid reimbursement for routine HIV screening			X	
Enact or amend state HIV testing laws [consistent with CDC 2006 recommendations]			X	
Reporting of CD4 and HIV viral load data to state HIV surveillance program			X	
Mental Health				
Enact mental health benefits legislation				X
Environmental Health				

Table 1 – Synthesized Table of All Legal Interventions Scan Results:

Explicit Legal Intervention	Healthy People 2020	Winnable Battles	Prevention Status Report	Community Guide for Preventive Services
Increase the proportion of persons served by community water systems who receive a supply of drinking water that meets the regulations of the Safe Drinking Water Act	X			
Immunization and Infectious Diseases				
Permitting vaccinations to be received through standing order prescriptions				X
Requiring vaccinations for child care, school, and college attendance				X
Healthcare Associated Infections				
Enact laws requiring states to publicly report some healthcare-associated infections		X		
Enact national law or regulation requiring mandatory healthcare-associated infections reporting across entire U.S.		X		
Enact law tying healthcare-associated infections prevention to Medicare/Medicaid payments		X		
Including in the Affordable Care Act incentive payments to hospitals that meet healthcare-associated infections performance standards		X		
Adolescent Health				
Statewide guidelines for sex education that include information on contraception and abstinence		X		
Laws requiring sex education programs to be effective, medically accurate, and proven effective		X	X	
Require health education courses in order to graduate from high school		X		

A Scan of Existing 50 State Survey and Policy Surveillance Resources

David Presley, JD
Policy Surveillance Manager, Public Health Law Research

Scott Burris, JD
Professor, Temple University Beasley School of Law
Director, Public Health Law Research

Introduction

The Public Health Law Surveillance and Research Committee (PHLSRC) asked PHLR to conduct a scan to identify currently available policy surveillance portals and 50 state surveys of public health law. We conducted this systematic but limited review to determine basic features of available resources, which are currently updated, and which public health related policies and laws receive regular scans.

Methods

PHLR staff conducted a series of keyword searches using the topical domains listed of *Healthy People 2020*. These searches were formatted as follows: "50 state law [keyword]". One search was conducted for each domain in *Healthy People 2020*, for a total of 42 individual searches. Search results were limited to all results published between January 1st, 2010 and April 1st, 2014. Only the first five pages of returns for each individual keyword search were used in this scan. Fifty individual URLs were on each page. This means a total of 10,500 individual search results were evaluated to determine whether they linked to a 50 state survey resource or database. All individual search results were analyzed to determine if they were a multi-state scan of a policy or law related to the search keywords derived from *Healthy People 2020*. Positive results were recorded in a list and then classified into four categories based on the availability of underlying legal data in quantitative form, whether the policy scan was being updated, and the access the scan provided to the relevant legal text. The unit of analysis for this report is the web-page, rather than the dataset or topical survey; some pages are resources containing many individual legal datasets or topical surveys.

Results and Discussion

We identified one hundred and 68 different policy surveillance resources that comply with one or more of the criteria described out below.* The results are presented in Table 3, starting on page

* We provide this information in light of significant work done in this realm by the National Network of Public Health Institutes. NNPHI recently published the "Local Policy Database Environmental Scan" which evaluated databases containing information on local policies across the United States. Through informant interviews and surveys of users of local policy databases, NNPHI made key findings about the lack of consistency and standardization of database technology and methods used to track policy. NNPHI found that researchers and policymakers are the most common users of local policy databases. The databases available are organized differently and provide different kinds of information across different policy domains. This lack of uniformity presents challenges to users, especially researchers who would use a policy database to evaluate the efficacy of laws. NNPHI suggested that a process be launched to develop uniform standards for policy databases and incorporate information and features from existing policy databases, which we have begun in this report. National Network of Public Health Institutes. Local Policy Database Scan. October, 2013. Available at: http://nnphi.org/uploads/media_items/local-policy-database-scan-1.original.pdf.

41 of this chapter. The table contains two columns, the first containing the web address of the resource and another column with a brief description of notable features the resource contains.*

There are a substantial number of 50 state surveys of public health law available on the internet. Only a small number of the web pages identified by this can be considered true policy surveillance portals, defined as providing access to legal data, keeping the data current, and offering access to the legal text. Most of the 50 state surveys are of uncertain provenance and reliability. The large number of resources available could support the inference that these surveys meet a need in public health law, but further research would be needed to determine how useful or satisfactory they are to public health lawyers, practitioners, the public or researchers.

The results of this scan are organized into four categories based on three different features that policy surveillance resources must possess in order to track the law and provide useful information for the user of these resources. These features are:

- Whether the scan of the legal text is up-do-date,
- Whether the scan provides some kind of access to the legal text, and
- Whether the scan provides access to a dataset of the legal information reported that is suitable for use in quantitative evaluation research.

Resources possessing all three features are the most useful and versatile, but also the least common. Legal data can be time consuming to produce and requires quality control and scientific methods to produce in a reliable, transparent way. Access to legal data is the least common feature in the resources we have identified.

Keeping policy surveillance resources updated can also be time consuming when regular practices or devoted staff time is not available and laws change rapidly. Despite this, up-to-date resources are essential for certain stakeholders who may use tools created by policy surveillance. The inclusion of this criterion highlights another important distinction in the resources we identified, showing that most resources exist only as snapshots in time of what the law was. We classify a policy surveillance resource as up-to-date if the information had been updated within three months of our examination, or if the portal states that information is updated at a specified interval.

Providing access to the legal text adds value for users, including both lawyers and non-lawyers engaged in public health policy development. It also enhances transparency by allowing users to verify the accuracy of coding or other classification.

Converting legal text to data through the act of coding is also an important element of a legal dataset created through policy surveillance. Legal data can be used in a variety of ways, including for the purposes of evaluating the law to build the evidence base for effective policies. Portals that code law into data are able more easily to afford access interactive maps and

* Please note that up to six of the policy surveillance resources included in this table have no apparent connection to public health. However, we include them here for the sake of completeness and transparency as they were still returns using the method outlined in this paper.

dynamic tables that allow end users to create comparative tables on laws and track the change in law over time.

Using these three criteria, we classified the resources identified in the scan into four categories, set out in Table 2, below.

Table 2 – Categories of Existing Policy Surveillance Resources:

Category	Number Found
Policy surveillance resources that are up-to-date, contain or link to the legal text, and provide legal data for download	4
Policy surveillance resources that are up-to-date and either contain or link to the legal text or provide legal data for download but do not do both	10
Policy surveillance resources that are up-to-date but neither contain nor link to the legal text nor provide legal data for download	19
Irregularly updated or static surveys of laws that may or may not provide the legal text but do not provide legal data for download	135

Resources in the first category contain all three important elements of policy surveillance as described above. Resources in the second category are up-to-date, but do not provide both downloadable legal data and access to the law. The third category contains resources which are up-to-date, but do not provide access to the legal text or to downloadable legal data. The fourth category contains surveys which appear to only be snapshots of laws as they existed at certain points in time. They are not consistently updated, or have never been updated, and provide no legal data. Many of them do provide access to legal text, but this only represents what the law was at the time the survey was conducted.

Only four policy surveillance resources were found that provide data, are up-to-date for the policies they survey, and provide access to the legal text. Ten resources were found that are regularly updated and either provide access to legal text, or contain legal data for download, but do not do both. Nineteen track changes in the law for the domains they survey, but do not provide access to legal text or data on the law. One hundred thirty-five policy surveillance resources meet one of the criteria above, but are not updated regularly or represent a study of the law in a domain at a single point in time. No legal data is available for download in any of the identified policy surveillance resources unless noted otherwise. The full results are reproduced in Table 2.

The four policy surveillance resources that provide data, are kept updated, and provide legal text access are the Alcohol Policy Information System (APIS), the State Tobacco Activities Tracking & Evaluation (STATE) System, LawAtlas, and the National Cancer Institute’s Classification of Laws Associated with School Students (CLASS). APIS contains surveillance conducted on alcohol related laws. STATE contains surveillance on smoking related laws. LawAtlas covers a variety of public health law topics, including laws on water quality, child safety restraints, medical marijuana, anti-drug overdose and more. However, LawAtlas does not contain as much information on any individual topic as STATE or APIS. We included CLASS in

this category with qualifications. CLASS monitors and categorizes laws across the United States related to nutrition and physical education. The site provides data on the law, briefs, interactive maps, and allows users to create and print custom tables analyzing laws in jurisdictions they choose. It does not provide links to the legal text, but citations to the text may be downloaded as part of its data offering. It is updated, but only every two years.*

The findings presented here suggest that substantial resources are currently being expended in the creation of 50 state health law information. The question of how best to fund policy surveillance remains unanswered. LawAtlas, APIS, CLASS and STATE and have all been funded by federal and/or foundation grants. Americans for Nonsmokers' Rights (ANR) U.S. Tobacco Control Laws Database, which is in our Category 2 because it does not provide access to legal text, now covers at least some of its costs through fees for research use. Greater efficiencies in methods and tools could reduce the cost, particularly of keeping datasets up to date, but it will not make cost irrelevant. In the future, it will be necessary to engage in discussions across the stakeholder groups to decide what policies should be monitored and how most efficiently to deliver that service. These matters are addressed in other chapters in this report.†

Conclusion

If supply can be taken as reasonable evidence of demand, there is a substantial need for resources that capture the variation in public health laws across the 50 states. Further research is needed to better define the types of users and uses that comprise this demand, but the findings presented here, along with other findings and recommendations‡ support further collaborative work to develop a national health policy surveillance network or system.

* After our research ended, the Guttmacher Institute launched a new version of its website of reproductive health laws, and now clearly meets all the criteria of a full-service policy surveillance portal. See <http://www.guttmacher.org/datacenter/>, visited July 11, 2014.

† See chapter titled Criteria for Selecting Policies for Surveillance: Recommendations of an Expert Committee.

‡ See Institute of Medicine. For the Public's Health: Revitalizing Law and Policy to Meet New Challenges. Washington, DC: The National Academies Press; 2011; National Network of Public Health Institutes. Local Policy Database Scan. October, 2013. Available at: http://nnphi.org/uploads/media_items/local-policy-database-scan-1.original.pdf.

Table 3

Policy surveillance resources that are up-to-date, contain or link to the legal text, and provide legal data for download:	
<u>Main location</u>	<u>Description</u>
http://alcoholpolicy.niaaa.nih.gov/	Data downloadable. This is a large database of alcohol-related laws across the U.S. Includes laws related to alcohol taxes, keg registration, pregnancy and alcohol consumption, health insurance, alcohol control/retail systems, underage drinking, blood alcohol concentration limits, and more.
http://apps.nccd.cdc.gov/statesystem/Default/Default.aspx	Data downloadable. Includes objective information on state tobacco control laws including excise taxes, smoke free facilities, youth access, advertising, fire safety, and more, as well as statistics on tobacco use, demographics, and the associated healthcare costs of tobacco use.
http://www.lawatlas.org	Data downloadable. Includes policy surveillance on a broad set of state laws including distracted driving, medical marijuana, access to naloxone, Good Samaritan overdose laws, water quality, and more.
http://class.cancer.gov/profiles.aspx	Data downloadable. Tracks physical education and nutrition policies. The prime function is that it ranks and classifies state policies in relation to federal guidelines. As a result, the legal text does not appear to be available, but citations are available in the data. Please note that CLASS is only updated once every two years. CLASS also contains well documented methods and supporting analyses.
Policy surveillance resources that are up-to-date and either contain or link to the legal text or provide legal data for download, but do not do both:	
Main location	Description
http://www.no-smoke.org/goingsmokefree.php?id=519	Data downloadable for purchase. Tracks dozens of laws and ordinances related to smoke free places like airports, hospitals, hotels/motels, stadiums. Also tracks laws regulating advertising to minors, youth access, e-cigarettes, and many more.
http://apps.nccd.cdc.gov/CDPHPPolicySearch/Default.aspx	This is Chronic Disease's legislative database. Includes pending, failed, and enacted legislation. Covers over 70 topics including laws/bills on vending machines, air pollution, medical care, school nutrition, disabilities, breastfeeding, and many more. The categorization of the laws/bills is not any more refined than these broad topics meaning comparable legislation must be located manually within the broad search categories.
http://www.stopbullying.gov/laws/index.html#listing	Contains anti-bullying laws. Contains links to legislative directories that provide some or all legal texts. This resource was based on a 2011 report by the Department of Education and seems to have taken over updating the laws presented there.
http://smartgunlaws.org/gun-policy/	Covers over 35 domains related to gun laws, including minimum age to purchase, universal background checks, assault weapons, imitation and toy guns, 'stand your ground' laws, gun industry immunity, dealer regulations, safe storage/gun locks, firearm registration, and more.

Table 3

http://www.nasbe.org/healthy_schools/hs/bytopics.php	Tracks policies related to school nutrition by topic area, but no coding or organization. It lists and describes somewhat related policies with statutes/policies linked.
http://docs.schoolnutrition.org/childnutrition/govtaffairs/statutes/	Tracks policies related to school nutrition by topic area. Useful search functionality and organization, but the topics are listed with the associated statute. No real ontology/categorization.
http://www.lungusa2.org/slati/	Tracks dozens of laws on tobacco control such as smoking restrictions, liability, preemption of tobacco laws, advertising, disclosure, youth access, taxes, and more.
http://medicalmarijuana.procon.org/view.resource.php?resourceID=000881	Medical marijuana laws provided in a table format. Also contains a historical timeline of medical marijuana laws.
http://righttoknow-gmo.org/states	Genetically modified food right to know laws. Contains passed and pending legislation. Links to legal text on state websites.
https://www.aclu.org/maps/state-standards-pregnancy-related-health-care-and-abortion-women-prison-map	Contains pregnancy-related health care and abortion for women laws. Contains citations and links to legal texts.
Policy surveillance resources that are up-to-date but neither contain or link to the legal text nor provide legal data for download:	
Main location	Description
https://www.guttmacher.org/sections/by-type.php?type=spib	Contains abortion and sexual health laws. Not a database, but a series of constantly updated PDFs in 28 different topical areas including HIV and sex education, regulation of abortion providers, partner treatment for STIs, infant abandonment, partial birth abortion, 'choose life' license plates, and more.*
http://www.iihs.org/iihs/topics#statelaws	Contains DUI, speed limits, older drivers, GDL, helmets, cellphones/texting, safety belts, red light cameras, and various vehicle restriction laws. No access to laws or citations. Information is provided in table format.
http://www.ghsa.org/html/stateinfo/laws/index.html	Contains highway safety/motor vehicle laws, including aggressive driving, child safety, drug impaired/drunken driving, GDL, helmets, mature drivers, seat belts, segways, sobriety checkpoints, speed limits, red light/speed cameras, and work zones. Table format, no citations or legal text available.
http://www.acscan.org/smokefree	Contains smoke-free place laws. This only contains a map of states with a law and the effective date. No citations or legal text provided.
http://www.rwjf.org/en/research-publications/find-rwjf-research/2010/03/interactive-tobacco-map-provides-latest-data-on-state-smoking-la.html	Smoke-free place laws, cigarette taxes, and tobacco spending
http://www.hivlawandpolicy.org/state-hiv-laws	Contains HIV testing, minors' access to STI/HIV testing/treatment, and healthcare workers with HIV laws. No legal text or citations to law.
http://www.immunize.org/laws/	Immunization mandate laws and requirements for care facilities and schools

* After our research ended, the Guttmacher Institute launched a new version of its website of reproductive health laws, and now clearly meets all the criteria of a full-service policy surveillance portal. See <http://www.guttmacher.org/datacenter/>, visited July 11, 2014.

Table 3

http://www.nvic.org/Vaccine-Laws/state-vaccine-requirements.aspx	Contains vaccine exemption laws. This is an advocacy group with the stated mission of expanding and protecting vaccine exemptions.
http://www.hrc.org/resources/entry/maps-of-state-laws-policies	Contains LGBT-relevant laws including adoption, hospital visitation, housing laws and policies, anti-discrimination, marriage, hate crimes, public accommodation, and anti-bullying laws. Unclear on how often it is updated.
http://www.thetaskforce.org/reports_and_research/issue_maps	Contains LGBT-relevant laws including hate crimes, marriage, non-discrimination, sodomy/right to privacy. Unclear on how often it is updated.
http://www.nolo.com/legal-encyclopedia/state-family-medical-leave-laws	Contains state medical leave laws. Contains no citations or legal text.
http://www.transgenderlaw.org/ndlaws/index.htm	Transgender discrimination laws
http://www.transgenderlaw.org/hatecrimelaws/index.htm	Transgender hate crime laws
http://www.hslda.org/laws/default.asp	Pay only. Contains homeschooling and related laws.
https://www.ncsbn.org/nlc.htm	Contains laws allowing nurses to practice across state lines. No legal text or citations. Has pending legislation.
http://www.deadiversion.usdoj.gov/drugreg/practioners/mlp_by_state.pdf	Contains mid-level practitioners and laws on their permission to prescribe. This is in a static PDF format but appears to be updated constantly.
http://www.lambdalegal.org/states-regions	LGBT-relevant laws, including adoption, marriage, anti-bullying, and anti-discrimination
http://www.fostercareandeducation.org/Datatabase.aspx	Contains foster care and education related laws. Search options are given in broad, non-specific categories meaning you cannot track individual legal interventions.
http://www.statedrugtestinglaws.com/	Pay only. Contains drug testing laws. Claims to provide access to the legal text and is updated frequently.
Irregularly updated or static surveys of laws that may or may not provide the legal text but do not provide legal data for download:	
<u>Individual survey location</u>	<u>Description</u>
http://www.alfa.org/alfa/Voter_ID_Requirements.asp	Contains voter ID laws. No statutes or citations. No information on how up to date this is.
http://www.alfa.org/alfa/State_Regulations_and_Licensing_Informat.asp	Contains assisted living regulations and licensure requirements. This is only a table that links to states' regulations. There is a pay wall/membership you must purchase to see more 50 state surveys on other related topics. No information on how up to date this is.
http://www.siecus.org/index.cfm?fuseaction=Page.viewPage&pageId=487&parentID=478	Contains sex education laws. Format is 50+ legal and policy memos describing the laws with citations.
http://www.grandfamilies.org/SEARCHLAWS.aspx	Tracks over 40 types of laws related to grandparents and children, including power of attorney, custody, adoption, foster parenting, medical issues, education, and laws keeping siblings in the same home. The database includes enacted and pending legislation. Does not code or visualize the law. Appears to have a third party app embedded into the site to provide the database and search functionality, or has a very sophisticated database created by the ABA's Center on Children and the Law.

Table 3

http://www.nccp.org/tools/policy/	Contains Laws affecting children in poverty (FMLA, income tax rates, child care subsidies, minimum wage standards and more). Can build custom tables. The data is sourced from a variety of primary and secondary sources with varying levels of currentness.
https://www.childwelfare.gov/systemwide/laws_policies/state/index.cfm?event=stateStatutes.showSearchForm	Contains many different child welfare laws across all states. Note that in addition to individual search results presented in tabular format, this contains static PDF surveys on each searchable point of law.
http://www.ncsl.org/	Many different state laws are tracked in table format. NCSL also contains many static PDFs or snapshots of laws across all states. Cataloging static PDFs and live policy tracking areas would take a significant amount of time as the structure of the website does not lend itself to quickly finding the different policy resources. Tracks pending legislation in some areas as well.
http://www.healthinfolaw.org/state	Contains healthcare related laws, including disclosure of substance abuse records, access to medical records, and healthcare exchanges
http://www.commonwealthfund.org/Publications/Issue-Briefs/2014/Mar/State-Action-to-Establish-SHOP-Marketplaces.aspx	Laws governing Small Business Health Options Program (SHOP) for states implementing their own programs
http://www.commonwealthfund.org/Publications/Issue-Briefs/2013/Dec/Simplify-Health-Plan-Choice.aspx	Laws requiring simplified health insurance plan choices
http://www.commonwealthfund.org/Publications/Issue-Briefs/2013/Dec/State-Insurance-Marketplaces-Shaping-Health-Plan-Design.aspx	Contains certification laws for health insurance plans. Does not cover all states.
http://www.commonwealthfund.org/Publications/Issue-Briefs/2013/Jul/State-Strategies-to-Avoid-Antitrust-Concerns-in-Medical-Homes.aspx	Antitrust laws for multi-payer medical homes
http://www.commonwealthfund.org/Publications/Issue-Briefs/2013/Feb/State-Action-2014-Market-Reforms.aspx	Laws implementing later pieces of the ACA (ability to do insurance rate reviews, ability to review insurance forms, authority to audit insurance markets for compliance with state insurance requirements, ability to levy fine and revoke licenses of insurance companies in the state, and more)
http://www.commonwealthfund.org/Publications/Issue-Briefs/2012/Mar/State-Action.aspx	Laws implementing early pieces of the ACA (no lifetime dollar limits in insurance plans, no annual dollar limits, requiring dependent coverage up to age 26, requiring coverage of preexisting medical conditions, and more)
http://www.commonwealthfund.org/Publications/Issue-Briefs/2012/Oct/Child-Only-Coverage-and-the-Affordable-Care-Act.aspx	Child-only health insurance coverage laws
http://www.commonwealthfund.org/Publications/Fund-Reports/2013/Jul/Design-Decisions-for-Exchanges.aspx	Laws governing state healthcare exchanges under the ACA
http://www.commonwealthfund.org/Publications/Fund-Reports/2014/Jan/Implementing-the-Affordable-Care-Act.aspx	Laws implementing the ACA

Table 3

http://www.nami.org/Content/NavigationMenu/State_Advocacy/Tools_for_Leaders/2013StateLegislationReportFinal.pdf	Mental health laws
http://telehealthpolicy.us/sites/telehealthpolicy.us/files/uploader/50%20State%20Scan%20February%202014%20Final.pdf	Telehealth laws
http://www.hci3.org/sites/default/files/files/Report_PriceTransLaws_2014.pdf	Healthcare price transparency laws
http://ps.psychiatryonline.org/article.aspx?articleID=1697859	Contains mental health parity laws. Published 2013, legal information from 2006.
http://www.aanma.org/advocacy/meds-at-school/	Laws on asthma medicine in schools
http://www.nwlc.org/sites/default/files/pdfs/NWLC2012_StateChildCareAssistanceReport.pdf	Child care laws
http://www.nwlc.org/sites/default/files/pdfs/state_child_care_assistance_policies_march_2014.pdf	Child care laws
http://www.nwlc.org/sites/default/files/pdfs/final_nwlc_2013statechildcareassistancereport.pdf	Child care laws
http://www.nwlc.org/sites/default/files/pdfs/pv_fs_state_child_dependent_care_tax_2013.pdf	Child care laws
http://www.nwlc.org/resource/state-state-fact-sheets-child-care-assistance-policies-2013	Child care laws
http://www.nature.com/jid/journal/v134/n3/full/jid2013357a.html	Indoor tanning laws
http://www.phaionline.org/wp-content/uploads/2013/12/AppendixPDF.pdf	Digital food marketing laws. Does not cover all states.
https://www2.ed.gov/rschstat/eval/bullying/state-bullying-laws/state-bullying-laws.pdf	Bullying-related laws
http://www.acog.org/~media/Committee%20Opinions/Committee%20on%20Adolescent%20Health%20Care/co506.pdf?dmc=1&ts=20120420T0036476375	Expedited partner therapy for STDs
https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=45&ved=0CEgQFjAEOCg&url=http%3A%2F%2Fwww.nhtsa.gov%2Fstaticfiles%2Fnti%2Fpdf%2F811661.pdf&ei=Ybc5U7WANsvjsASdooCwCA&usg=AFQjCNFvW2gtFsfnje8w0AYFDLX9uCTLQ&bvm=bv.63808443,d.cWc&cad=rja	Drinking and driving testing laws
http://pediatrics.aappublications.org/content/127/4/703.full.pdf	Contains laws on use and retention of newborn screening blood samples. Published 2011, laws from 2008-2009.
http://www.aad.org/File%20Library/Global%20navigation/Education%20and%20quality%20care/State%20cancer%20registries/state-cancer-registries-laws-and-requirements.pdf	Cancer registry laws and requirements

Table 3

http://cdp.cancer.gov/humanSpecimens/survey/	Human tissue specimens and research laws
http://www.arentfox.com/sites/default/files/Downloads/practicesindustries/practices/AF-Survey-of-Damage-Laws.pdf	Laws on damages
http://www.apapracticecentral.org/advocacy/state/telehealth-slides.pdf	Telepsychology laws
http://kff.org/medicaid/fact-sheet/where-are-states-today-medicare-and-chip/	Medicaid eligibility and coverage
http://www.childtrends.org/wp-content/uploads/2013/09/changing-the-course-for-infants-and-toddlers-FINAL.pdf	Contains child welfare laws and policies. Note this was a participatory survey and five states were excluded because they did not respond.
http://www.naccrra.org/sites/default/files/default_site_pages/2013/wcdb_state_tables_april_17_final.pdf	Child care center laws
http://www.acf.hhs.gov/sites/default/files/ore/ccdf_policies_database_2011_book_of_tables.pdf	Contains Child Care and Development Fund state level laws/policies. This is a federal block grant that states have wide discretion over the distribution of.
http://www.naccrra.org/sites/default/files/default_site_pages/2012/background_checks_white_paper_final_july_6.pdf	Background checks for child care workers
http://www.eli.org/sites/default/files/eli-pubs/d23-04.pdf	Water laws and regulations
http://gov.uchastings.edu/public-law/docs/ejreport-fourthedition.pdf	Contains environmental justice laws. Note these laws cover a broad range of topics like community participation in siting and permitting polluting facilities, grants for cleaning up environmental pollution, and retrofitting older polluting facilities and equipment.
http://coloradofarmtoschool.org/wp-content/uploads/downloads/2012/11/State-food-procurement-report-FINAL.pdf	Food procurement laws
http://coloradofarmtoschool.org/wp-content/uploads/downloads/2012/11/Farm-Food-Safety.10.26.12.pdf	Food safety laws
https://docs.google.com/a/temple.edu/file/d/0By4iEudJEIClODY2NwVINTUtmZgwNC00ZDgyLThhNDAtYzYzNDI4OGY1YzY2/edit?pli=1	Contains farm to school legislative scan. This is a snapshot of laws enacted within a certain time period and does not necessarily contain laws that were passed prior to the study period.
https://www.osha.gov/dsg/InjuryIllnessPreventionProgramsWhitePaper.html	Injury and illness prevention laws for employers
http://www.apic.org/Advocacy/Legislation	Contains infection tracking and prevention legislative activity. This tracks pending and implemented legislation.
http://hygreen.com/wordpress/?p=92	Healthcare acquired infection laws
http://www.tobaccofreekids.org/research/factsheets/pdf/0097.pdf	Tobacco tax rates
http://data.lambdalegal.org/publications/downloads/fs_hiv-criminalization.pdf	HIV criminalization laws
http://hivlawandpolicy.org/sites/www.hivlawandpolicy.org/files/Criminalization%20Manual%20%28Revised%2012.5.13%29_0.pdf	Contains HIV criminalization laws. Highly detailed and contains statutes as well as case law. Has been updated in the past but does not appear current.

Table 3

<p>https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=14&ved=0CD0QFjADOAo&url=http%3A%2F%2Fwww.hivlawcommission.org%2Findex.php%2Fregional-dialogues-main%2Fhigh-income-countries%2Fregional-issue-brief-laws-and-practices-relating-to-criminalisation-of-people-living-with-hiv-and-populations-vulnerable-to-hiv%2Fdownload&ei=qGM8U6CVKuevsATM_IH4Dw&usg=AFQjCNF71G_KQNeENgZcOcw8BKFbg4AD-g&bvm=bv.63934634,d.dmQ&cad=rja</p>	<p>Contains international HIV criminalization laws. No legal text or citations.</p>
<p>http://www.glad.org/rights/states</p>	<p>Various HIV testing, discrimination, and LGBT rights related laws. Only covers a few states in the Northeast and appears three years out of date.</p>
<p>http://projects.propublica.org/tables/penalties</p>	<p>HIV criminalization laws and policy statements from state health departments.</p>
<p>http://criminalisation.gnpplus.net/node/239</p>	<p>International HIV criminalization laws. Contains legal text and case law.</p>
<p>http://www.vaccinesafety.edu/cc-exem.htm</p>	<p>Vaccine/immunization exemption laws. Color-coded map only.</p>
<p>http://www.cdc.gov/HomeandRecreationalSafety/Poisoning/laws/exam.html</p>	<p>Physical examination prior to prescribing laws</p>
<p>http://www.cdc.gov/HomeandRecreationalSafety/Poisoning/laws/forms.html</p>	<p>Tamper-resistant forms to prevent fraudulent prescription laws</p>
<p>http://www.cdc.gov/HomeandRecreationalSafety/Poisoning/laws/pain_clinic.html</p>	<p>Pain clinic regulation laws</p>
<p>http://www.cdc.gov/HomeandRecreationalSafety/Poisoning/laws/rx_limits.html</p>	<p>Prescription drug limit laws</p>
<p>http://www.cdc.gov/HomeandRecreationalSafety/Poisoning/laws/dr_shopping.html</p>	<p>Doctor shopping laws</p>
<p>http://www.cdc.gov/HomeandRecreationalSafety/Poisoning/laws/id_req.html</p>	<p>Requiring patient identification before dispensation laws</p>
<p>http://www.cdc.gov/HomeandRecreationalSafety/Poisoning/laws/immunity.html</p>	<p>Immunity from prosecution or mitigation at sentencing for seeking assistance during a drug overdose laws</p>
<p>http://www.futureswithoutviolence.org/userfiles/file/HealthCare/Compendium%20Final.pdf</p>	<p>Domestic violence laws and healthcare for domestic violence victims</p>
<p>http://www.kingcounty.gov/healthservices/health/data/GunViolence/status.aspx</p>	<p>Contains gun laws. Compares Washington state to other states' requirements.</p>
<p>http://healthyamericans.org/assets/files/updated%20Facts%20Hurt%20Report%201.2013.pdf</p>	<p>Contains broad cross-sectional snapshot of laws in place across all states meant to prevent injury. Includes seatbelt, helmet, DUI, child seats, restraining orders against domestic violence perpetrators, PDMP, and youth TBI laws. Note that this is more of a report card and ranking of the states' laws so it contains some qualitative information on the laws and no legal text or citations.</p>
<p>http://www.cyberbullying.us/Bullying_and_Cyberbullying_Laws.pdf</p>	<p>Cyberbullying laws, including anti-bullying, anti-cyber bullying/electronic harassment, criminalization of bullying, school sanctions, required school anti-bullying policies, and off-campus behavior laws</p>

Table 3

http://www.treatmentadvocacycenter.org/storage/documents/Standards_-_The_Text_June_2011.pdf	Mental health & legal standards for court-ordered treatment
http://www.mwl-law.com/wp-content/uploads/2013/03/statute-of-limitations-for-all-50-states.pdf	Statutes of limitation
https://www.childwelfare.gov/systemwide/laws_policies/statutes/safehaven.pdf	Infant safe haven laws
http://www.nationalsafehavenalliance.org/statutes/	Infant safe haven laws
http://www.treatmentadvocacycenter.org/storage/documents/Initiating_Court-Ordered_Treatment.pdf	Mental health & who may initiate proceedings for a psychiatric intervention
http://www.treatmentadvocacycenter.org/legal-resources/state-standards/2275	Mental health & criteria for emergency hospitalization for a psychiatric evaluation
http://www.treatmentadvocacycenter.org/storage/documents/new_the_updated_state_standards_chart.pdf	Mental health & assisted psychiatric treatment laws
http://www.tabc.state.tx.us/education/pdfs/Happy-Hour-Laws.pdf	Happy hour laws
http://www.sagewisdom.org/legalstatus.html	Salvia divinorum laws
http://saferoads.org/files/2014_roadmap_report.pdf	Motor vehicle safety laws, including booster seats, DUI, ignition interlock, teen driving/GDL, open container, child endangerment, texting and driving, and helmet laws.
http://frac.org/pdf/2013_summer_nutrition_report.pdf	Summer nutrition for children laws
http://mentailnesspolicy.org/studies/state-standards-involuntary-treatment.html	Mental health & involuntary admission laws
http://mentailnesspolicy.org/studies/involuntary-commitment-petitions.pdf	Mental health & who may petition a court to require treatment for a person with severe mental illness laws
http://ps.psychiatryonline.org/data/Journals/PSS/0/appi.ps.201300175.pdf	Inclusion/exclusion of substance use disorders when defining mental illness for involuntary hospitalization
http://www.rcfp.org/rcfp/orders/docs/RECORDING.pdf	Tape recording/wiretapping laws
http://www.morganlewis.com/documents/50StateSurvey_StateImmigrationLaws.pdf	Immigration laws affecting employers
http://kaiserfamilyfoundation.files.wordpress.com/2013/01/8122.pdf	State laws regulating health insurance rates
http://www.allcommunitymedia.org/wp-content/uploads/2011/08/States-at-a-Glance-Franchise-Rules.pdf	State cable franchise laws
http://www.iii.org/issue_updates/regulation-modernization.html	Insurance regulation
http://www.claimsjournal.com/news/national/2012/09/19/213818.htm	Older driver laws
http://www.itep.org/pdf/pb30eld.pdf	Tax laws for Social Security and pension income
http://www.americanbar.org/content/dam/aba/administrative/law_aging/2013_Chart_of_Guardianship_Appeals_091213.authcheckdam.pdf	Statutory appeals provisions in adult guardianship
http://www.americanbar.org/content/dam/aba/administrative/law_aging/2013_04_CH	Guardian felony disqualification and background requirements laws

Table 3

ARTFelonyandBackgroundcheck.authcheckdam.pdf	
http://www.americanbar.org/content/dam/aba/administrative/law_aging/2013_04_CHARTCapacityandInitiation.authcheckdam.pdf	Capacity definition and initiation of guardianship proceedings laws
http://www.americanbar.org/content/dam/aba/administrative/law_aging/2013_04_CHARTRepresentationandInvestigation.authcheckdam.pdf	Representation and investigation in guardianship proceedings laws
http://www.americanbar.org/content/dam/aba/administrative/law_aging/2013_04_CHARTNotice.authcheckdam.pdf	Notice in guardianship proceedings
http://www.americanbar.org/content/dam/aba/administrative/law_aging/2013_04_CHARTMonitoring.authcheckdam.pdf	Monitoring following guardianship proceedings
http://www.americanbar.org/content/dam/aba/administrative/law_aging/2013_04_CHARTConduct.authcheckdam.pdf	Conduct and findings of guardianship proceedings
http://www.americanbar.org/content/dam/aba/migrated/aging/PublicDocuments/guard_auth_res_dec_8_2010.authcheckdam.pdf	Guardian authority for residential decisions
http://www.americanbar.org/content/dam/aba/migrated/aging/docs/guardian_chart.authcheckdam.pdf	Healthcare decision making authority
http://www.americanbar.org/content/dam/aba/images/public_education/civicsaddressedinstatestatutes_educationcommissionofthestates_september2010.pdf	Laws on high school curriculum requirements
http://www.americanbar.org/content/dam/aba/migrated/domesticviolence/PublicDocuments/PPO_Summary_by_State.authcheckdam.pdf	Protection orders and the inclusion of pets
http://www.americanbar.org/content/dam/aba/images/public_education/citizenshipeducationinclusioninstateaccountabilityandassessmentssystemseducationcommissionofthestates_september2010.pdf	Subject matter requirements for statewide educational assessments/student testing
http://www.americanbar.org/content/dam/aba/administrative/law_aging/2013_EmeritusRulesChartJune.authcheckdam.pdf	Emeritus pro bono practice laws
http://www.americanbar.org/content/dam/aba/administrative/law_aging/2013_HCPA-CHT-Jan_25_with_oral_directive_edits.authcheckdam.pdf	Health care power of attorney laws
http://www.nlrc.aoa.gov/Legal_Issues/Advance_Directives/docs/50StateSurvey_POA.pdf	Durable powers of attorney for finances laws
http://www.ltccc.org/publications/documents/ltccc-rpt-informed-consent-laws-sept2013_001.pdf	Informed consent laws in U.S. nursing homes
http://www.nasuad.org/documentation/Surveys/Guardianship_Powers-of-Attorney.pdf	Guardianship laws and durable powers of attorney

Table 3

http://nrckids.org/index.cfm/resources/state-licensing-and-regulation-information/	Licensing requirements for child care centers
http://www.publichealthlawcenter.org/resources/healthy-child-care	Laws relating to health, nutrition, and exercise in child care settings
http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_308261.pdf	State physical education laws and mandates
http://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/Obesity.pdf	State physical education laws and mandates
http://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/Safe%20Storage.pdf	Laws requiring safe storage of firearms
http://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/Concussion.pdf	Youth concussion laws
http://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/Immunizations.pdf	Vaccine exemption laws
http://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/CPS.pdf	Contains child seatbelt laws. Note this simply compares whether the state follows the American Academy of Pediatrics child safety restraint guidelines.
http://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/E-Cigarettes.pdf	E-cigarette laws
http://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/GDL.pdf	Contains graduated driver license laws. Note this simply compares whether the state follows the American Academy of Pediatrics child safety restraint guidelines.
http://web.law.columbia.edu/sites/default/files/microsites/climate-change/files/Publications/Students/State%20Hazard%20Mitigation%20Plan%20Database%20Updated%20Version_Final%20READ%20ONLY.xlsx	Climate change and disaster preparedness plan laws
http://www.verifiedvotingfoundation.org/wp-content/uploads/2012/09/CountingVotes2012_Final_August2012.pdf	Contains voting infrastructure laws. Note that a grading/rating system on each state's voting infrastructure is co-mingled with objective information on the state's voting system laws.
https://www.networkforphl.org/topics__resources/topics__resources/resources_collection/	Contains static surveys of laws on a variety of topics, including access to naloxone, elder driver restrictions, emergency powers for health departments, EpiPen use in schools, intergovernmental cooperation agreements, youth sports concussion laws, noise ordinances, and more. Not organized in a searchable format.
http://ctj.org/90reasons/90ReasonsFull.pdf	State tax loophole closure laws
http://www.ndaa.org/pdf/Minor%20Consent%20to%20Medical%20Treatment%20(2).pdf	Contains laws governing a minor's consent to various medical procedures and practices, including treatment for STDs, receiving contraceptives, prenatal care, care for a minor's child, and abortion.
http://www.goodsamaritanlawproject.com/images/Is_There_a_Doctor__and_a_Lawyer_in_the_House.pdf	Good Samaritan laws

Table 3

http://www.heartsafeusa.com/modules/forum/index.cfm	Automatic external defibrillator laws
http://www.healthreformgps.org/wp-content/uploads/333.pdf	Medicaid expansions under the Affordable Care Act
http://www.itep.org/pdf/whopaysreport.pdf	Contains state income and sales tax policies across the states. Note this report includes objective information about the features of different states' tax laws alongside statistics on tax income among different income groups.
http://itep.org/itep_reports/2014/04/most-americans-live-in-states-with-variable-rate-gas-taxes.php#.U2ENxKhdXy1	Gas tax rates and policies
http://www.cdc.gov/dhds/pubs/docs/Pharmacist_State_Law.PDF	Pharmacist collaborative practice agreement laws
http://www.hightechredneckincorporated.com/article_a/138.htm	Night vision hunting laws
http://www.licensetovape.com/e-cigarette-state-laws-guide/	E-cigarette sales laws
http://reason.com/archives/2014/02/08/legal-pot-coming-soon-50-state-marijuana	Recreational, medical, and the decriminalization of marijuana
http://www.diabetes.org/living-with-diabetes/know-your-rights/discrimination/drivers-licenses/drivers-license-laws-by-state.html	Driver's license laws for people with medical conditions
http://www.cdc.gov/hiv/policies/law/states/	Contains HIV criminalization, laboratory reporting, and HIV testing laws. No information on how up-to-date this is. Only contains a map and a table linking to state-specific laws by topic.
http://www.ecs.org/html/educationIssues/ECSStateNotes.asp	Contains School related laws (structure, governance, and curriculum). Dozens, possibly hundreds of tables covering many topics. Do not typically have citations, but most seem to have been updated within the past 5 years.
https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/Downloads/Phase-3-State-Tracking-Report.pdf	Healthcare acquired infection tracking laws

Criteria for Selecting Policies for Surveillance: Recommendations of an Expert Committee

David Presley, JD
Policy Surveillance Manager, Public Health Law Research

Scott Burris, JD
Professor, Temple University Beasley School of Law
Director, Public Health Law Research

Introduction

On January 17, 2014, the Public Health Law Surveillance and Research Committee met to accomplish three objectives:

- Define criteria for prioritizing policies for surveillance and evaluation research;
- Attempt to apply the criteria by identify policies that meet them; and
- Suggest next steps for defining a national public health law research agenda.

The results of those discussions are described here. Prior to the creation of this final document, we solicited further feedback from the PHLSRC on a draft of this report. Recommendations and comments from that round of feedback have been incorporated into this document.

Policy Surveillance

Surveillance in public health is the means by which people who are responsible for preventing or controlling threats to health get the timely, ongoing, and reliable information they need about the occurrence, antecedents, time course, geographic spread, consequences, and nature of these threats among the populations they serve.¹⁵ “Policy surveillance” is the ongoing, systematic collection, analysis and dissemination of information about laws and other policies of health importance.¹⁶

The emergence of policy surveillance as a distinct practice has been gradual. Although there is a long tradition of “50 state surveys” in public health,²⁵⁻²⁷ the use of scientific methods to create datasets of legal variables suitable for use in evaluation research has emerged in the last twenty years as a result of sustained research funding for legal evaluation in key areas, most notably alcohol and tobacco control. In contrast to “traditional” legal research, policy surveillance entails tracking policies over time, and the use of systematic quantitative or qualitative coding to create scientific datasets.¹⁶ Leading examples include the Alcohol Policy Information System (APIS),²⁸ CDC’s State Tobacco Activities Tracking and Evaluation (STATE) System,²⁹ and NCI’s Classification of Laws Associated with School Students (CLASS).³⁰ This and similar work demonstrated that law could be collected and coded for quantitative with a high degree of accuracy and with sufficient nuance to capture important legal variation.

When PHLR was founded in 2009, the limited extent of scientific legal mapping in public health was an early concern:

Unlike many other areas of public health research, research on public health law and policy has developed few surveillance systems. ... Gathering information about the patterns of public health law adoption and implementation across states and local governments over time generally is done de novo in each research project. Maintaining and updating databases of laws would dramatically improve researchers’ ability to conduct rigorous policymaking, mapping, intervention, implementation, and mechanism studies at low cost. High standards of transparency concerning the data-collection and coding protocols for such databases would allow subsequent researchers to update publicly available data sets at reasonable marginal cost.⁸ [pp. 194–195]

The Institute of Medicine, in a 2011 Report, agreed that this was a serious problem, and suggested that

... a health policy surveillance system could be developed, pilot-tested, and supported by CDC. Such a system would gather information on the geographic reach, scope, and timing of significant new laws and policies designed to promote health and prevent disease and disability at the population level.

The surveillance system could include such health-related laws and policies adopted at federal, state, and local government levels, including laws that define regulatory and enforcement powers and duties for public health agencies and for other governmental entities.²

PHLR contributed to the development of the practice by commissioning a paper³¹ and then a methods monograph¹⁷ on the topic. It developed a data set on laws regulating cell phone use by drivers, as a way of testing and refining tools and methods.³² Scientific methods of legal mapping make it feasible to keep data sets current, but they also facilitate the development of longitudinal legal data. Longitudinal data, from a research perspective, is crucial to capturing the variation in law that supports causal inference, so data sets constructed for research frequently encompass many years of legal change.³³ Beyond its value for research, the depiction of legal change over time can be of interest to policy makers, advocacy groups and citizens interested in following, or forestalling, trends.

The current project was commissioned by OSTLTS as a means of building consensus on policy surveillance standards and practices. (Other products in this set include a Technical Guide and Competencies for conducting policy surveillance, based on a Delphi Process to define basic standards; a scan of federal health law recommendations, and a scan of existing policy surveillance and legal survey resources.) While scientific methods and dedicated software can reduce the cost of measuring policies over time, policy surveillance nonetheless requires a commitment of scarce resources. It is therefore important to select policies for surveillance carefully. The committee was asked to suggest criteria for this purpose.

Criteria for Selecting Policies & Legal Interventions Meriting Surveillance

The following criteria were derived from an exercise in which the committee members identified their top three criteria to identify what policies to be monitored through policy surveillance. Discussion was followed by a dot-voting procedure in which each committee member had six votes to distribute among all the criteria proposed by committee members. Below is a synthesis of the voting results and the discussion supporting six identified criteria ranked in order from highest to lowest number of votes.*

* Another criterion discussed was whether a law has been shown to be effective. It is logical to focus limited surveillance resources on legal interventions we know to be effective. Committee members,

Significance of the health problem targeted by the law or policy

Identifying a problem with a significant impact on health is a relevant criterion because it focuses policy surveillance efforts on pressing health issues. The committee agreed that both absolute and disparate impact could justify surveillance, so that laws addressing significant impact in discrete sub-populations satisfy this criterion even if the overall population impact is small. The quality of the impact was also important to consider, so that candidates for surveillance could be evaluated in terms of disability adjusted life years (DALYs) or quality adjusted life years (QALYs) expected to be saved.

Policy salience

This is a criterion compounded from several important themes elicited at the meeting. Policy salience is the total interest shared in a policy or law by stakeholders including policy-makers, experts, the public, media, and advocates. This interest may be measured in a variety of ways, and includes news coverage, advocacy activity, legislative activity, and academic or public health literature around a public health problem and related policy solutions. Within this criterion, legislative activity is the prime consideration, because it is by definition the best measure of policy-maker reliance on the legal intervention, and a high level of legislative action both creates the most pressing need for surveillance and the best opportunity for quasi-experimental evaluation. Policy salience also has a temporal dimension: given the costs of surveillance, a policy that addresses a problem of short-term interest, or that has already been adopted by most relevant jurisdictions, may not be a suitable candidate.

Existence of evidence or evaluation

Policy surveillance creates data and identifies key variables for evaluating a law's impact. The state of the evidence base supporting a given policy is therefore an important consideration. Emerging policies that have been adopted by multiple jurisdictions but not yet evaluated rate the strongest on this criterion. If a law's public health impact has been extensively evaluated (as measured, for example, by a Community Guide recommendation), the evaluation rationale for surveillance will often be attenuated.

Whether the law is an identified national priority

Federal health agencies have identified many legal interventions as evidence-based or sufficiently plausible to be included in recommendations for action. The United States Department of Health and Human Services' Healthy People 2020 program, the Centers for Disease Control's Winnable Battles initiative, CDC Prevention Status Reports and the Community Guide to Preventive Services all identify effective or recommended legal interventions across a wide range of health domains. Given that our national health agencies have prioritized these policies, surveillance is indicated both to support evaluation and to

however, observed that laws known to be effective are less pressing cases for evaluation, and tend to already have been widely adopted, making them lower in policy salience. It was also noted that tracking laws that are ineffective or harmful is also important, since repeal of a harmful or wasteful law may be as valuable for health and the society as enactment of an effective one. Consequently, we recommend this criterion not be included in our final list. However, we include the criterion here for the sake of transparency and completeness.

provide transparency and accountability as to the extent to which federal recommendations and evidence-based interventions are actually being adopted.

Cost of conducting the policy surveillance

The time and resources expended in conducting policy surveillance are also critical factors. The two main drivers of cost are the degree of difficulty in obtaining the legal text, and the complexity of the legal regime to be measured. Local ordinances and institutional policies are often unavailable in centralized electronic legal databases. Longitudinal datasets that include state regulations also encounter this problem if they go back more than a few years. Complexity problems can arise if laws vary significantly in approach across jurisdictions or time, if the significant points of variation are many and technical, or if the rules are simply long and dense. Estimating the full scope, accessibility, and complexity of the law or legal authority to be surveyed is an important step in selecting a policy for surveillance.

Conclusions

Policy surveillance has the potential to improve evaluation of the impact of law on health, diffusion of legal innovations, stakeholder awareness and accountability for meeting national, state and local health policy goals. The development of widely accepted surveillance methods, standards and software systems can reduce the cost and increase the utility of surveillance data. Inevitably, however, policy surveillance is a demanding practice competes with other public health practices for limited funding. It is therefore important to make careful decisions about when to invest in surveillance. The selection criteria proposed in this report are a sensible starting point for prudent choices.

Committee Members and Participants

The following people participated as members of the Public Health Law Surveillance and Research Committee at the January 17, 2014 meeting:

Andre Verani, Public Health Policy Analyst, Center for Global Health, Division of Global HIV/AIDS, Centers for Disease Control and Prevention

Andrew Roszak, Senior Director for Environmental Health, Pandemic Preparedness and Catastrophic Response, The National Association of County and City Health Officials

Angela McGowan, Senior Program Officer, Robert Wood Johnson Foundation

Damika Webb Barr, Policy Surveillance Director, Public Health Law Research

David Presley, Legal Analyst, Public Health Law Research

Donald Benken, Senior Public Health Advisor, Public Health Law Program, Office for State, Tribal, Local, and Territorial Support, Centers for Disease Control and Prevention

Elizabeth Ferrell Bjerke, Director, JD/MPH Program, University of Pittsburgh Graduate School of Public Health, Associate Director of Law and Policy at the Center for Public Health Practice

Elizabeth Skillen, Associate Director for Policy, Division of Healthcare Quality Promotion, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention

Fred Shaw, Senior Advisor for Health Reform, Office of the Associate Director for Policy Centers for Disease Control and Prevention

Jennifer Bernstein, Senior Attorney, Network for Public Health Law

Jessica Kronstadt, Director of Research and Evaluation, Public Health Accreditation Board

Quang H. Dang, Senior Staff Attorney, Technical Assistance Legal Director, National Policy and Legal Analysis Network to Prevent Childhood Obesity, ChangeLab Solutions

Samantha Harrykissoon, Public Health Analyst, Office of the Associate Director for Policy, Centers for Disease Control and Prevention

Scott Burris, Director, Public Health Law Research

Siobhan Gilchrist, Health Policy Researcher, Division for Heart Disease and Stroke Prevention, Centers for Disease Control and Prevention

Tara Ramanathan, Public Health Analyst, Public Health Law Program, Office for State, Tribal, Local and Territorial Support, Centers for Disease Control and Prevention

Thomas Merrill, General Counsel, New York City Department of Health and Mental Hygiene

Technical Standards for Policy Surveillance and Legal Datasets: Report of a Delphi Process

David Presley, JD
Policy Surveillance Manager, Public Health Law Research

Thomas Reinstein
Doctoral Fellow, Public Health Law Research

Scott Burris, JD
Professor, Temple University Beasley School of Law
Director, Public Health Law Research

Introduction

This report describes the result of a Delphi process undertaken by the Robert Wood Johnson Foundation's Public Health Law Research program (PHLR) to create technical standards and competencies for the practice of creating legal datasets for policy surveillance. A Delphi process is a series of surveys aimed at building expert consensus on a topic. Delphi surveys are administered in a way that gives weight to all participants and prevents any one strong opinion from overly influencing the results.³⁴

The following chapter discusses the results of this survey. It lays out the resulting technical standards that the experts participating in this Delphi agreed upon.* We also use these standards to derive a set of draft competencies necessary to conduct policy surveillance which are listed at the end of this document. The full results, including specific methods, prompts from the first and second rounds of the Delphi process, calculated means, and vote distributions, are attached in an appendix to this document.

Background

In 2011, the Institute of Medicine's Committee on Public Health Strategies to Improve Health recommended action to advance a practice of policy surveillance:

To track laws and policies (largely public sector, but including, where practical, major policy areas in the private sector) that successfully influence the health of populations, a health policy surveillance system could be developed, pilot-tested, and supported by CDC.² [p. 103]

The suggestion was part of a broader discussion of the need for improvements in methods, infrastructure and support for evaluating law's impact on health, which in turn reflected a small but scientifically important body of methodological writing and research practice that had applied scientific principles of transparency and replicability to legal research.^{8,16,31,35} Resources like the Alcohol Policy Information System and tobacco laws collected by Americans for Non-Smokers' Rights had proven to be vital to research and evaluation of legal interventions in these public health domains.

Several public health law organizations responded to these calls by exploring methods and tools for conducting the suggested test of a surveillance system. PHLR developed software for coding and publishing datasets in a policy surveillance mode, the LawAtlas system. Lawyers at CDC's OSTLTS and Network for Public Health Law, both of which regularly conduct 50 state surveys, experimented with LawAtlas and experimented with their own methods and tools.

* In another chapter in this report and a related document published separately, we have used the Delphi Panel's standards to define preliminary versions of policy surveillance competencies and a technical guide to conducting policy surveillance. See chapters titled "Policy Surveillance Competency Model. Public Health Law Research" and the report "A Technical Guide for Policy Surveillance. Public Health Law Research; 2014". Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2469895.

As the IOM's Report suggests, legal monitoring and evaluation in public health have been hampered by a lack of research infrastructure, i.e., a set of commonly accepted standards and practices across institutions and topical domains. Common approaches are desirable for several reasons, including efficiency in training researchers, interoperability/sharing of data, the use of common platforms, ease of publication, and convenience and clarity for research and public users. Given some diversity in standards and practices, OSTLTS asked PHLR to conduct a Delphi process among experts in this emerging practice to advance consensus on technical standards for creating legal datasets and policy surveillance systems.

PHLR's Delphi Process Method

The Delphi method provides guidance for research in areas where standards are undefined and practices are evolving. Policy surveillance is one such area. PHLR used a Delphi process consisting of two rounds, recruiting fifteen experts to participate. These experts were invited to participate based on their experience conducting 50 state surveys, health surveillance, policy surveillance, and/or creating legal datasets.

The PHLR researchers consulted published literature and created an initial set of possible standards for and essential elements of policy surveillance.^{17,31} From these standards and elements, researchers derived 44 propositions. Researchers then asked the panel to consider each proposition independently in an Internet survey that was specified in advance to go through two rounds. These propositions covered four aspects of policy surveillance and legal dataset construction: basic elements of policy surveillance; defining a legal dataset's scope; the legal research process; and the coding process. Most propositions were framed as affirmative statements. Respondents rated whether a certain practice should be required on a five-step Likert scale ("Strongly Agree", "Agree", "Neither Agree nor Disagree", "Disagree", and "Strongly Disagree"). Another group of questions identified the frequency with which an action (such as updating legal datasets) should be taken. Answer choices offered different frequencies ("daily," "weekly," "monthly," etc.). With respect to some propositions, such as the appropriate venue for publishing legal datasets, experts were given a list of examples and a free-response text box in which to provide their views. In the first round, members of the Panel were invited to provide comments and suggest other standards for consideration in the second round.

After the first round, the researchers revised the survey. Responses to many of the propositions demonstrated consensus. We deemed any first proposition that reached a mean of four on the five-point Likert scale to have been agreed upon as a technical standard unless comments raised an important issue for further discussion in the second round. A few items that were within 0.1 of the cut off were included in the consensus based on comments and explanations of the experts (for example, that the lower score was meant to flag an exception or contingency, not contest the general principle).

Propositions on which consensus was achieved in the first round, and in which no important new issues were raised in comments, were deemed accepted and not repeated in round two. New items were created based on suggestions or evidence disagreement or confusion on specific items. A second survey was circulated with 25 items of the same types used in the first

round. Panelists were provided with the full results of the first round, including comments, and their comments were again solicited for the second round.

Results of the Delphi Process and Discussion

Policy surveillance is an emerging practice. The first round of the survey relied on a small existing literature^{17,31} in proposing both a general conceptualization of policy surveillance and the specific technical standards for each step. The survey therefore started with the proposition that policy surveillance was a systematic public health practice built on a scientific process for creating datasets of laws and policies. This section describes the Respondents' consensus views on: the basic elements that define policy surveillance as a distinct public health practice, conceptualizing a legal dataset or end product of policy surveillance, the legal research process, and the coding process. This chapter will discuss these categories in turn and lists and discusses the technical standards that the Respondents agreed upon. (Standards the Respondents disagreed with have been left out of this document except where they inform an aspect of an agreed upon standard.) Each part of this section contains a summary list of final standards followed by discussion of Respondents' comments. Full results can be found in the [Appendix](#).

Basic Elements of Policy Surveillance

The Respondents agreed that policy surveillance as a practice included six distinct steps or phases:

1. **Development and Scope:** During this phase, the research team is assembled and conducts the research necessary to define the scope of the dataset, create a preliminary list of variables to be measured, and define an initial research strategy.
2. **Systematic Collection of the Law:** In this phase, the research team refines and revises the research strategy as necessary to ensure that all legal texts within the scope of the research are identified and collected.
3. **Coding:** In this phase, researchers complete the creation of an initial coding scheme and begin coding the law. Coding results are reviewed carefully for consistency, and the coding scheme is reviewed and revised as necessary to ensure validity.

4. **Documentation of the Research in a Codebook and Protocol:** Research and coding decisions, processes and rules are carefully recorded in a protocol. The protocol, which should always be available along with the dataset, describes the background, rationale, objectives, methodology, statistical evaluation of the data, and the overall organization of a quantitative legal dataset. The codebook describes and documents the variables, internal coding notes and coding questions asked in a quantitative legal dataset.
5. **Dissemination:** Completed legal datasets should generally be freely available to researchers and other interested users in accessible web repositories and formats
6. **Updating:** Policy Surveillance entails the monitoring of changes in law, and the timely incorporation of those changes into the dataset. New data should never replace old data, but rather changes in law should be added to create datasets that captures the attributes of the law over time.

Respondents reached high agreement on PHLR’s standard definition of a dataset, which is “a collection of quantitative measurements that describe the apparent features of a specified body of law across jurisdictions and/or time.” Those respondents who disagreed argued that because some degree of legal interpretation might be necessary to understand the law in question, qualitative data should be included alongside quantitative data. While policy surveillance can include data on, for example, implementation of a law or how that law is interpreted, the inclusion of that information relies on conscious decisions by the team creating the legal dataset. It is not a rule that such information can or cannot be considered a component of policy surveillance.

Although Respondents agreed that datasets must be kept current, they disagreed on how frequently updates ought to take place. Several agreed that datasets should be updated within a week of changes in the law. Most, however, thought that yearly updates would be sufficient.

Basic Elements of Policy Surveillance

1. A legal dataset is a collection of quantitative measurements that describe the apparent features of a specified body of law across jurisdictions and/or time.
2. Dataset construction requires the following steps:
 - a. Define the scope of the dataset
 - b. Systematically collect the law
 - c. Coding
 - d. Documenting the research in a codebook and protocol
 - e. Dissemination
 - f. Updating
3. A dataset should capture the effective date of legal text.
4. Datasets should be longitudinal.
5. Datasets should be updated on a regular basis.
6. A dataset and its supporting documents should be made freely available on the Internet.
7. A codebook document explaining all of the questions in the coding scheme, variables, and variable values should accompany each legal dataset.
8. A protocol containing data collection start and end dates, data collection methods, search terms, sources of legal text, search returns, inclusion/exclusion criteria, number of researchers, quality control measures and explanatory notes on coding should accompany each legal dataset.

Generally, these respondents noted that while constant updates would be ideal, limited resources might only allow for updating on an annual or semiannual basis.

No respondent questioned the necessity of a dataset being longitudinal. Such a database captures relevant laws from their first iteration (or another appropriate period) and records changes in the laws over time.

Respondents agreed that datasets should be made freely available on the Internet, preferably under a Creative Commons or similar license. The respondents also agreed that a coding and data collection protocol should accompany each dataset. A standard protocol includes:

- Data collection start and end dates
- Data collection methods
- Search terms
- Sources of legal text
- Search returns
- Inclusion/exclusion criteria
- Number of researchers
- Quality control measures
- Explanatory notes on coding

Respondents agreed that these basic steps and coding methods are most important to include in a protocol, while disseminating specific execution of strategy is less important. Our respondents also agreed that the original legal texts consulted in building the dataset should be made available in electronic form at a minimum.

Legal datasets should be made available online when published. The respondents also agreed that the published dataset should include the following features:

- User-generated (interactive) tables including user-selected jurisdictions and attributes.
- Static summaries (e.g., pdf files) of the attributes of single jurisdictions or single attributes across all jurisdictions.
- One-page static summary (pdf format) of the results in narrative form, with or without maps/graphs/tables/other graphics.
- Interactive maps allowing the user to query dimensions of the law researched and view the results.

Respondents agreed that results of policy surveillance surveys could also be usefully disseminated in professional journals.

Respondents mostly agreed that legal datasets should capture the effective dates in legal text. Some, however, commented that capturing the effective date was less critical, depending on the dataset's aims. One respondent argued that effective dates would not be necessary if the dataset was to be a snapshot of the law during a particular moment in time. Another noted that dates of enactment might be more crucial for local and state laws, since such legislation can

often languish for weeks or months before being signed. Still, respondents generally agreed that including laws' effective dates in a dataset was important.

Including FIPS (Federal Information Processing Standards) code met with a mixed reception. FIPS code is useful as a geographic identifier for local and state laws. The second round included more specific language regarding FIPS code's usefulness, but the mean still fell below the survey's cutoff at 3.9. Despite this low score, few respondents offered strong arguments against using FIPS code.

Defining the Scope of the Dataset

The next section dealt with how to conceptualize a dataset. It began with PHLR's method for establishing a dataset's scope, which is defined as an "iterative process of research, analysis and expert consultation" and asked the panel if they had comments or concerns. This method met with high approval from our respondents.

The respondents agreed without equivocation that a domain expert should be consulted when defining the scope of a dataset. Domain experts must have experience with the laws at issue and are used in identifying the key elements that are theorized to have the greatest impact on public health.

Multiple experts may be necessary to properly define the scope of a legal dataset. Some respondents pointed out that a committee of experts rather than a single expert would be optimal because finding multiple experts, each with expertise in different fields, is easier than finding one expert of multiple fields.

The panel agreed that while a domain expert should have expertise in the law subject to policy surveillance, that expert did not necessarily need to be an attorney. Comments centered on the fact that many public health law experts are not lawyers, yet have been sufficient, in the experiences of the committee members, to help conceptualize legal datasets.

A domain expert should also understand how the law being collected is implemented. The mean for this question fell below the cutoff, but is included here because comments from the respondents supported the standard more vigorously. Knowledge of implementation is different than *coding* implementation. An expert who knows the critical elements of a law is more likely to develop an efficient coding scheme for a law that affects public health.

Other potential standards on the use and competencies of experts failed to meet our cut-off score. Because policy surveillance as a practice is still nascent, these issues are still evolving. The committee disagreed that a domain expert must be an attorney, commenting that a public health expert can potentially master of a narrow band of law relevant to their field. In response

Defining the Scope

1. The dataset's scope should be defined through an iterative process of research, analysis, and expert consultation.
2. A domain expert is essential to defining the scope of a legal dataset.
3. More than one domain expert may be needed, often using experts from several different fields.
4. A domain expert should have a sophisticated and professional understanding of the law being collected.
5. A domain expert should understand how the law being collected is implemented.

to the prompt “a domain expert should understand the health problem the law is trying to address” most respondents commented that using multiple experts, each with training in specific medical fields, would be more useful than one generalist. These failed standards indicate that expert use is important but not standard. Many targets of policy surveillance may have few or no experts in the field. Also, based on the goals of the legal dataset, multiple experts may be needed in different capacities. Setting hard rules on the use of experts may, in some instances, be undesirable.

Research Process

SEARCHING FOR THE LAW

Accurate legal research is essential to a useable legal dataset. The standards in this section are meant to achieve this accuracy in two ways. First, they comprise steps that promote transparency and replicability. If the research can be duplicated, then others can determine whether certain steps employed when gathering the legal text were properly carried out. Second, the standards include steps meant to ensure that fail-safes internal to the team creating the legal dataset are in place. Errors are less likely to be included in the final legal dataset if regular reviews and checks are conducted.

We first turn to the standards outlining the legal research process. The committee agreed that multiple search strategies are required for reliable and accurate legal research. Examples of different search strategies include keyword searches in different search engines (e.g., Lexis Nexis, Westlaw, FindLaw, etc.), manual searches in the table of contents of a legal text, physically locating legal texts when not available online, and reviewing previous compilations of laws where they exist.

The standard appeared in both the first and second rounds of the Delphi process. There was confusion on what constituted a “search strategy.” PHLR defines this term as an independent method of searching for legal text and information when conducting policy surveillance. Our goal of including this in the second Delphi round was to clarify that multiple keyword searches across multiple databases still constitutes only one search strategy.

All search elements must be recorded to ensure replicable, transparent legal datasets. Search elements include any keywords/search strings used, number of results, sources searched, the time and date of the search, timespan of records searched, and inclusion and exclusion criteria. This standard allows for the full verification of a search strategy used in creating a legal dataset.

Research Process: Searching for the Law

1. Multiple search strategies are required for reliable, accurate legal research in policy surveillance. These strategies may include keyword searches, index/table of contents searches, locating physical files, and reviewing secondary sources.
2. All search elements must be recorded to ensure replicable, transparent legal datasets. Search elements include any keywords/search strings used, number of results, sources searched, time and date search was conducted, timespan of records searched, inclusion and exclusion criteria.
3. Full text and citations used in creating the legal dataset must be retained, organized, and made accessible to researchers and other staff creating the legal dataset.

The above standard was included in both rounds of the Delphi process. There was high agreement in both rounds, but the survey clarified that one search element did not include recording *all* search returns. Instead, this was only to record the number of search results, even if they were not included in the legal dataset.

The committee also agreed that all legal texts and citations in all individual entries in the legal dataset must be retained, organized, and made accessible to the researchers and other staff creating the legal dataset. Committee members indicated that static, online sources of legal text often go down, change, or reformat to the point where original texts can no longer be found. Merely retaining the citations or web addresses to a legal text would be insufficient. Retaining the precise legal text the researcher found also ensures the information can be stored for later duplication alongside the finished legal dataset itself. As discussed earlier, making available the legal text behind the legal dataset is essential not only for transparency, but also for users of the dataset.

Quality Control

More than one person must redundantly research the same entries in a legal dataset to determine the accuracy and completeness of that legal research. The respondents agreed that redundant research is a key element of quality control. In commenting on this standard, many expressed concern over issues related to resources. Redundant research represents expending resources on what, at first glance, appears to be the same task. Another resource concern is that another person must conduct this redundant research to ensure quality control. The original researcher merely duplicating her research efforts fails to satisfy any concern over accuracy. There is simply no assurance that any errors in categorization or retention of legal text will not be repeated.

The team must create an explicit quality control plan at the outset of creating a legal dataset to ensure the accuracy of legal research. The plan must cover how redundant research will be conducted and must include adequate thresholds for identifying and correcting systematic errors. As a companion to this question, the respondents noted what their ideal quality control plan would be. The survey included PHLR's quality control plan as an example. PHLR conducts 100 percent redundant research until 95 percent of all redundant research is consistent with the original research. Once this is achieved, another person redundantly researches

Research Process: Quality Control

1. More than one person must redundantly research the same entries in a legal dataset to determine the accuracy and completeness of that legal research.
2. An explicit quality control plan for research must be made at the outset of creating a legal dataset to ensure the accuracy of legal research.
3. PHLR's method for determining the percentage of records that should be redundantly researched is generally agreed upon. This method is to redundantly review 100% of records until 95% of the redundantly reviewed records have the same results. After achieving that ratio, only 20% of records should be redundantly researched.
4. Legal researchers/coders and supervising staff must hold regular review meetings during the research process to resolve discrepancies between redundant researchers and ensure the scope of the legal dataset is correct.

20 percent of additional research unless the consistency drops below 95 percent. Respondents either wholly agreed with this quality control plan or agreed with minor modifications.

Legal researchers/coders and supervising staff must hold regular review meetings during the research process to resolve discrepancies between redundant researchers and ensure the scope of the legal dataset is correct. Recurring meetings, at PHLR, become the avenue through which other quality control measures are put into use. The committee members met high agreement on this standard.

Updating Research

As previously noted, the respondents found updating a legal dataset to be essential. Respondents also agreed that the research strategies and protocols used in creating the legal dataset should be used when searching for new laws passed after the creation of the legal dataset. Issues remain with how this could be achieved.

Research Process: Updating

The same research strategies used to create the legal dataset must be used when updating with newly passed laws within the current scope of the legal dataset.

PHLR uses two separate methods of updating—passive and active. In passive updating, a researcher configures an automatic alert using keywords through Google Alerts, legislative tracking websites, and/or Westlaw/Lexis Nexis. These automatic alerts will forward information to the researcher, allowing him or her to take the steps necessary to add new entries to the legal dataset. However, passive updating can be cumbersome, as it can involve large numbers of returns that typically will not include newly passed relevant legal text. This is because most passive update systems are limited in the robustness of the searches they recognize. More robust passive search tools only allow a limited number of searches to track per user.

Active updating involves using the same search strategy and elements previously recorded. However, the beginning date of the search for legislation is limited to the end date for the last search was conducted. This increases the likelihood that all relevant legal text will be found—and allows for the further validation of the initial search strategy—but is more labor intensive and episodic. Passive updating, in contrast, results in continuous updating, but does not allow the researcher to indicate that the *entire* legal dataset is fully up-to-date as it does not involve a complete search in every jurisdiction.

Coding Process

CODING TOOLS

Coding should be conducted through specialized software rather than pen and paper. Coding platforms can impact the accuracy and error rate of coding. Unnecessary extra steps and unintuitive user interfaces can exacerbate a coder's mental fatigue. Even though one may code via pen and paper, the data will still be put into an electronic format. Transferring the data from physical to electronic format

Coding Process: Coding Tools

1. Coding should be done using software instead of pen and paper.
2. The coding software should show the legal text and the coding questions on the same screen.
3. The coding software should allow simultaneous use by two or more researchers.

introduces another step where errors can occur. Coding with software from the outset eliminates this possibility and was one of the main reasons respondents used when agreeing on this standard.

Coding software should show the legal text and the coding questions on the same screen. The committee members agreed on this standard, indicating that simultaneously viewing the correct legal text while coding helps minimize errors. Requiring a coder to mix and match the correct legal text with the correct entry—especially where hundreds of entries may exist in a legal dataset—is an unnecessary burden when this can be done systematically with software.

The coding software should also allow for multiple users to access and make changes to a legal dataset simultaneously. Committee members indicated that this would also minimize errors. Merging data from different files introduces a chance that data can be misplaced or deleted. Working from incorrect or older files creates a higher chance of this happening.

Quality Control

The methods laid out below are similar to those in the research process section with some slight variation. Committee members agreed that redundant coding is important to correct errors in a legal coder's observations of a legal text's contents. Without checks of the data, no formal system for correcting errors or verifying the clarity and precision of the coding scheme would exist.

Committee members also agreed that the team must develop an explicit plan for quality control in the legal coding process at the outset of creating a legal dataset. Creating a plan forces the team to determine thresholds for how many entries should be redundantly coded and the management of that process. Alongside this question, the survey asked the panel for their ideal quality control plan in the redundant coding process, again using the PHLR process as an example. This process is to conduct 100 percent redundant coding until 95 percent of all redundantly coded entries are the same as the original coding. Once this is achieved, another person redundantly codes 20 percent of additional coding unless the consistency drops below 95 percent. Respondents either wholly agreed with this quality control plan or agreed with minor modifications.

Continuous review of the redundant coding is an essential quality control step. It ensures the timely resolution of discrepancies between coders and gives

Coding Process: Quality Control

1. More than one person must redundantly code the same entries in a legal dataset to determine the accuracy of the coding and ensure the reliability of the coding scheme.
2. An explicit quality control plan for legal coding must be made at the outset of creating a legal dataset to ensure the accuracy of legal coding.
3. PHLR's method for determining the percentage of records that should be redundantly coded is generally accepted. This method is to redundantly review 100% of records until 95% of the redundantly reviewed records have the same results. After achieving that ratio, only 20% of records should be redundantly coded.
4. Legal researchers/coders and supervising staff must hold weekly review meetings during the coding process to resolve discrepancies between redundant coders and ensure the scope of the legal dataset is correct.

the team a platform to assess and fix any issues with the coding scheme. The committee also agreed that these meetings should be held weekly, with the possibility that they occur more often earlier in the process than later. Having a more intense schedule early on ensures less wasted time as critical errors can be fixed early in the process.

Coding Updates

The committee agreed that coding new entries for laws passed after a legal dataset has been finished should follow the same coding protocols. Coding updates requires 100 percent redundancy because typically very few entries are added at once when updating. Even when an issue is hotly contested, only a handful of jurisdictions may pass new legislation on a yearly basis. And coding conventions outlined in supporting documentation must be followed for the sake of consistency in coding and creating useful data.

Coding Process: Updates

The same coding conventions used to create the legal dataset must be used when updating with newly passed laws within the current scope of the legal dataset.

Full Technical Standards

Below is the complete list of technical standards as derived from the Delphi process. These are combined from the above analyses and reproduced below for convenience.

Basic Elements of Policy Surveillance

1. A legal dataset is a collection of quantitative measurements that describe the apparent features of a specified body of law across jurisdictions and/or time.
2. Dataset construction requires the following steps:
 - a. Define the scope of the dataset
 - b. Systematically collect the law
 - c. Coding
 - d. Documenting the research in a codebook and protocol
 - e. Dissemination
 - f. Updating
3. A dataset should capture the effective date of legal text.
4. Datasets should be longitudinal.
5. Datasets should be updated on a regular basis.
6. A dataset and its supporting documents should be made freely available on the Internet.
7. A codebook document explaining all of the questions in the coding scheme, variables, and variable values should accompany each legal dataset.
8. A protocol containing data collection start and end dates, data collection methods, search terms, sources of legal text, search returns, inclusion/exclusion criteria, number of researchers, quality control measures and explanatory notes on coding should accompany each legal dataset.

Defining the Scope

1. The dataset's scope should be defined through an iterative process of research, analysis, and expert consultation.
2. A domain expert is essential to defining the scope of a legal dataset.
3. More than one domain expert may be needed, often using experts from several different fields.
4. A domain expert should have a sophisticated and professional understanding of the law being collected.
5. A domain expert should understand how the law being collected is implemented.

Research Process: Searching for the Law

1. Multiple search strategies are required for reliable, accurate legal research in policy surveillance. These strategies may include keyword searches, index/table of contents searches, locating physical files, and reviewing secondary sources.
2. All search elements must be recorded to ensure replicable, transparent legal datasets. Search elements include any keywords/search strings used, number of results, sources searched, time and date search was conducted, timespan of records searched, inclusion and exclusion criteria.
3. Full text and citations used in creating the legal dataset must be retained, organized, and made accessible to researchers and other staff creating the legal dataset.

Research Process: Quality Control

1. More than one person must redundantly research the same entries in a legal dataset to determine the accuracy and completeness of that legal research.
2. An explicit quality control plan for research must be made at the outset of creating a legal dataset to ensure the accuracy of legal research.
 - a. PHLR's method for determining the percentage of records that should be redundantly researched is generally agreed upon. This method is to redundantly review 100 percent of records until 95 percent of the redundantly reviewed records have the same results. After achieving that ratio, only 20 percent of records should be redundantly researched.
3. Legal researchers/coders and supervising staff must hold regular review meetings during the research process to resolve discrepancies between redundant researchers and ensure the scope of the legal dataset is correct.

Research Process: Updating

1. The same research strategies used to create the legal dataset must be used when updating with newly passed laws within the current scope of the legal dataset.

Coding Process: Coding Tools

1. Coding should be done using software instead of pen and paper.

2. The coding software should show the legal text and the coding questions on the same screen.
3. The coding software should allow simultaneous use by two or more researchers.

Coding Process: Quality Control

1. More than one person must redundantly code the same entries in a legal dataset to determine the accuracy of the coding and ensure the reliability of the coding scheme.
2. An explicit quality control plan for legal coding must be made at the outset of creating a legal dataset to ensure the accuracy of legal coding.
 - a. PHLR's method for determining the percentage of records that should be redundantly coded is generally accepted. This method is to redundantly review 100 percent of records until 95 percent of the redundantly reviewed records have the same results. After achieving that ratio, only 20 percent of records should be redundantly coded.
3. Legal researchers/coders and supervising staff must hold weekly review meetings during the coding process to resolve discrepancies between redundant coders and ensure the scope of the legal dataset is correct.

Coding Process: Updates

1. The same coding conventions used to create the legal dataset must be used when updating with newly passed laws within the current scope of the legal dataset.

Members of the Delphi Panel

James Anderson, Senior Behavioral Scientist, RAND Corporation

Jennifer Bernstein, Senior Attorney, Network for Public Health Law Mid-States Region

James Buehler, Health Commissioner, Philadelphia, PA*

Lisa Caucci, Senior Legal Analyst, CDC Public Health Law Program

Thomas Chapel, Chief Evaluation Officer, CDC

Randy Elder, Scientific Director, Community Guide Branch, CDC

Michael Frakes, Assistant Professor of Law, Cornell Law School

Carol Galletly, Associate Professor, Medical College of Wisconsin, Center for AIDS Intervention Research

Debra Haire-Joshu, Professor and Associate Dean of Research, Washington University in St. Louis

Laura Hitchcock, Policy Research and Development Specialist, Public Health - Seattle & King County

Madhav Marathe, Director, Network Dynamics and Simulation Science Laboratory, Professor, Virginia Tech

Matthew Penn, Director, Public Health Law Program/Office for State, Tribal, Local and Territorial Support/CDC

* At the time of the study, Dr. Buehler was Professor, Health Management & Policy, Drexel University School of Public Health.

Richard Puddy, Director, CDC – Office of the Associate Director for Policy
Bobby Rasulnia, Health Scientist, Office for State, Tribal, Local and Territorial Support/CDC
Lainie Rutkow, Assistant Professor, Johns Hopkins Bloomberg School of Public Health

A Policy Surveillance Competency Model

David Presley, JD
Policy Surveillance Manager, Public Health Law Research

Thomas Reinstein
Doctoral Fellow, Public Health Law Research

Scott Burris, JD
Professor, Temple University Beasley School of Law
Director, Public Health Law Research

Introduction

Competencies are an important tool for defining, training and assessing professional skills.³⁶ A competency may be “defined as a cluster of related knowledge, attitudes, and skills that affects the major part of one's job and can be measured against well-accepted standards and improved through training.”³⁷ [p. 4] Competencies have been integrated into public health practice and education.³⁸ Public health law competencies have been proposed^{39,40} and are under development at present. Defining competencies for policy surveillance is a useful step towards establishing the practice as an element of public health law practice and legal epidemiology.

Method

A Delphi panel of experts in surveillance, public health legal research and policy surveillance was created. The panel was presented with an initial set of technical standards for policy surveillance and the creation of legal datasets based on a small methods literature.^{17,31,35} Consensus achieved in the two planned rounds of the Delphi process was the basis of a technical guide for policy surveillance.* Using the Core Competencies for Public Health Professionals³⁸ as the model, the skills required to achieve the standards specified by the Delphi Process and operationalized in the technical guide were put into the form of competencies in three professional tiers.

A PHLR staff person identified all technical standards requiring some action to be taken by a person conducting policy surveillance. Once these were identified, another PHLR researcher conducted redundant classification of the technical standards using the same criterion. Discrepancies between the two independent classifications were then reconciled, producing the final list of technical standards used below.

The technical standards were then grouped together if they indicated a single, discrete step of the legal dataset creation process. Some technical standards may refer to different elements of the same action. For example, retaining and engaging content experts during the conceptualization phase may be a single, broad activity. However, folded into this are multiple decisions and assessments that must be made. Are multiple experts appropriate for the legal dataset? What fields of expertise are most relevant? Can the team-member assess the expert's level of knowledge of the law's implementation? These all relate to one competency—engaging with experts—yet they are all different technical standards.

Language for the individual competency statements was crafted by assessing the explicit or implied actions that must be taken fulfill each technical standard. These actions were then written as competency statements.

Three levels of mastery were written for each competency statement. The levels of mastery are entry, manager, and director level positions. These levels reflect a potential stratification of

* For a more detailed discussion of the methods and results of the Delphi survey process, please refer to page two of the chapter titled “Technical Standards for Policy Surveillance and Legal Datasets: Report of a Delphi Process”.

responsibilities based on teams that conduct policy surveillance at PHLR. Entry level mastery descriptions apply to professionals carrying out the fundamental tasks of policy surveillance. This level of mastery includes actions that involve legal research, observation or coding of legal data, and the initial creation of coding schemes. The next level, manager, involves directing more work and initiating processes. These include implementing the quality control process, reviewing work, and making final determinations on coding schemes. The highest level, director, replaces direct responsibility with the creation and refinement of processes and monitoring overall productivity. The director's responsibilities include creating quality control plans, monitoring overall legal research and coding, and ensuring the processes are being adhered to.

Competencies Necessary to Conduct Policy Surveillance

Conceptualization and Scoping of a Legal Dataset

- Technical Standard: The dataset's scope should be defined through an iterative process of research, analysis, and expert consultation.

Competency Statement	Indicator of Level of Mastery		
	<i>Tier 1: Entry Level</i>	<i>Tier 2: Manager</i>	<i>Tier 3: Director</i>
Determines the scope of a legal dataset through iterative research, analysis, and expert consultation.	Uses background legal research to draft a coding scheme based on expert analysis.	Ensures completeness of legal research and develops coding scheme.	Evaluates sufficiency of legal research and evaluates sufficiency of coding scheme.

- Technical Standard: A domain expert is essential to defining the scope of a legal dataset.

Competency Statement	Indicator of Level of Mastery		
	<i>Tier 1: Entry Level</i>	<i>Tier 2: Manager</i>	<i>Tier 3: Director</i>
Engages and interacts with a domain expert who will assist in scoping a legal dataset.	Assists in searching for one or more domain experts with sufficient knowledge of the legal dataset's topic.	Identifies and engages one or more domain experts with sufficient knowledge of the legal dataset's topic.	Determines whether the domain expert(s) used have sufficient knowledge of the legal dataset's topic.

- Technical Standard: More than one domain expert may be needed, often using experts from several different fields.
- Technical Standard: A domain expert should have a sophisticated and professional understanding of the law being collected.

- Technical Standard: A domain expert should understand how the law being collected is implemented.

Competency Statement	Indicator of Level of Mastery		
	<i>Tier 1: Entry Level</i>	<i>Tier 2: Manager</i>	<i>Tier 3: Director</i>
Incorporates a domain expert's knowledge and recommendations into the scope and coding scheme of a legal dataset.	Incorporates domain expert knowledge into the draft coding scheme for a legal dataset.	Ensures thorough use and engagement of the domain expert in defining the scope of the legal dataset.	Evaluates the incorporation of the domain expert's recommendations for the scope of the legal dataset.

Research Phase

- Technical Standard: Multiple search strategies are required for reliable, accurate legal research in policy surveillance. These strategies may include keyword searches, index/table of contents searches, locating physical files, and reviewing secondary sources.
- Technical Standard: All search elements must be recorded to ensure replicable, transparent legal datasets. Search elements include any keywords/search strings used, number of results, sources searched, time and date search was conducted, timespan of records searched, inclusion and exclusion criteria.
- Technical Standard: The same research strategies used to create the legal dataset must be used when updating with newly passed laws within the current scope of the legal dataset.

Competency Statement	Indicator of Level of Mastery		
	<i>Tier 1: Entry Level</i>	<i>Tier 2: Manager</i>	<i>Tier 3: Director</i>
Conducts legal research for a legal dataset using a specified search strategy.	Conducts legal research using the chosen search strategy.	Evaluates the implementation of the search strategy and completeness of the legal research.	Defines the search strategy to be used for the legal dataset.

- Technical Standard: Full legal text and citations used in creating the legal dataset must be retained, organized, and made accessible to the researchers and other staff creating the legal dataset.

Competency Statement	Indicator of Level of Mastery		
	<i>Tier 1: Entry Level</i>	<i>Tier 2: Manager</i>	<i>Tier 3: Director</i>
Retains and organizes legal text during the research phase.	Collects legal text and retains it according to the organization system.	Evaluates adherence to the system used to retain and organize legal text.	Creates the system used to retain and organize legal text.

- Technical Standard: An explicit quality control plan for research must be made at the outset of creating a legal dataset to ensure the accuracy of legal research.

Competency Statement	Indicator of Level of Mastery		
	<i>Tier 1: Entry Level</i>	<i>Tier 2: Manager</i>	<i>Tier 3: Director</i>
Creates and employs an explicit quality control plan to ensure the accuracy of legal research.	Conducts initial and redundant legal research.	Implements the quality control plan through assigning redundant research and evaluating divergences in research results.	Defines the explicit quality control plan for the legal research phase.

- Technical Standard: Legal researchers/coders and supervising staff must hold regular review meetings during the research process to resolve discrepancies between redundant researchers and ensure the scope of the legal dataset is correct.

Competency Statement	Indicator of Level of Mastery		
	<i>Tier 1: Entry Level</i>	<i>Tier 2: Manager</i>	<i>Tier 3: Director</i>
Regularly meets to review divergent research results and ensures the scope of the legal dataset is correct.	Discusses divergent research results and corrects errors/omissions where possible.	Ensures divergent research results are reconciled.	Monitors research results to ensure that the legal dataset's scope is correct.

Coding Phase

- Technical Standard: An explicit quality control plan for legal coding must be made at the outset of creating a legal dataset to ensure the accuracy of legal coding.

Competency Statement	Indicator of Level of Mastery		
	<i>Tier 1: Entry Level</i>	<i>Tier 2: Manager</i>	<i>Tier 3: Director</i>
Conducts coding within an explicit quality control plan to ensure the accuracy of legal research.	Uses questions in the coding scheme to observe and record the existence of key elements in the collected legal texts.	Implements the quality control plan through assigning redundant coding and evaluating divergences in coding results.	Defines the explicit quality control plan for the coding process.

- Technical Standard: Legal researchers/coders and supervising staff must hold weekly review meetings during the coding process to resolve discrepancies between redundant coders and ensure the scope of the legal dataset is correct.
- Technical Standard: The same coding conventions used to create the legal dataset must be used when updating with newly passed laws within the current scope of the legal dataset.

Competency Statement	Indicator of Level of Mastery		
	<i>Tier 1: Entry Level</i>	<i>Tier 2: Manager</i>	<i>Tier 3: Director</i>
Regularly meets to review divergent coding results and ensures the scope of the legal dataset is correct.	Discusses divergent coding results and corrects errors/omissions where possible.	Ensures divergent coding results are reconciled.	Monitors coding results to ensure that the legal dataset's scope is correct.

Discussion

These competencies have been derived from a Delphi process and methods literature in policy surveillance. They have not been presented to the Delphi panel nor other interested parties and experts.

These competencies are intended to facilitate training in policy surveillance in the public health law workforce, and of students in health policy courses learning policy surveillance as a skill. They are not intended as general competencies for the overall public health workforce. In relation to public health law competencies, they may best be understood as a subset created for specific purposes rather than a general competency. However, it may be suggested that public health law general competencies should include competency in policy surveillance.

The competencies presented here, like the related technical guide for policy surveillance, represent a version 1.0 of tools that are required in public health law practice and legal epidemiology, but must continue to evolve with greater practical experience. Next steps could

include circulating these proposed competencies among practitioner experts in policy surveillance, and with public health law educators. A formal method should be adopted for soliciting feedback, especially on the potential uses of these competencies. Different models of using the competencies should be explored, including their application to job descriptions, continuing education training plans, assessment and improvement of an organization's capacity to conduct policy surveillance.

Appendix 1: Complete Policy Scan

Table A1 – Healthy People 2020 Objectives with Explicit Legal Interventions:

Health People 2020 Objective Number	Healthy People 2020 Objective Text
EH-4	Increase the proportion of persons served by community water systems who receive a supply of drinking water that meets the regulations of the Safe Drinking Water Act
IVP-17	Increase the number of States and the District of Columbia with “good” graduated driver licensing (GDL) laws
IVP-21	Increase the number of States and the District of Columbia with laws requiring bicycle helmets for bicycle riders
NWS-1	Increase the number of States with nutrition standards for foods and beverages provided to preschool-aged children in child care
NWS-2.2	Increase the proportion of school districts that require schools to make fruits or vegetables available whenever other food is offered or sold
NWS-3	Increase the number of States that have State-level policies that incentivize food retail outlets to provide foods that are encouraged by the Dietary Guidelines for Americans
PA-9.1	Increase the number of States with licensing regulations for physical activity in child care that require activity programs providing large muscle or gross motor activity, development, and/or equipment
PA-9.2	Increase the number of States with licensing regulations for physical activity in child care that require children to engage in vigorous or moderate physical activity
PA-9.3	Increase the number of States with licensing regulations for physical activity in child care that require a number of minutes of physical activity per day or by length of time in care
SA-6	Increase the number of States with mandatory ignition interlock laws for first and repeat impaired driving offenders in the United States
TU-8	Increase comprehensive Medicaid insurance coverage of evidence-based treatment for nicotine dependency in States and the District of Columbia
TU-12	Increase the proportion of persons covered by indoor worksite policies that prohibit smoking
TU-13.1	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in private worksites
TU-13.2	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in public worksites
TU-13.3	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in restaurants
TU-13.4	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in bars
TU-13.5	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in gaming halls
TU-13.6	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in commercial daycare centers
TU-13.7	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in home-based daycare centers
TU-13.8	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in public transportation
TU-13.9	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in hotels and motels
TU-13.10	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in multiunit housing

Table A1 – Healthy People 2020 Objectives with Explicit Legal Interventions:

Health People 2020 Objective Number	Healthy People 2020 Objective Text
TU-13.11	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in vehicles with children
TU-13.12	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in prisons and correctional facilities
TU-13.13	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in substance abuse treatment facilities
TU-13.14	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in mental health treatment facilities
TU-13.15	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in entrances and exits of all public places
TU-13.16	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking on hospital campuses
TU-13.17	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking on college and university campuses
TU-16.1	Eliminate State laws that preempt stronger local tobacco control laws on smoke-free indoor air
TU-16.2	Eliminate State laws that preempt stronger local tobacco control laws on advertising
TU-16.3	Eliminate State laws that preempt stronger local tobacco control laws on youth access
TU-17.1	Increase the Federal and State tax on cigarettes
TU-17.2	Increase the Federal and State tax on smokeless tobacco products
TU-19.1	Reduce the illegal sales rate to minors through enforcement of laws prohibiting the sale of tobacco products to minors in States and the District of Columbia
TU-19.2	Reduce the illegal sales rate to minors through enforcement of laws prohibiting the sale of tobacco products to minors in Territories

Table A2 – Full Summary of Healthy People 2020 Legal Intervention Scan Results:

Topic Area	Explicit mention of law in the title	Law/policy included in the target-setting method/data/tech spec	Policymakers and Law Enforcement	Legislation
Access to Health Services	0	0	0	0
Adolescent Health	0	0	4	0
Disability and Health	0	0	6	0
Educational & Community-Based Programs	0	0	9	0
Environmental Health	1	39	55	0
Family Planning	0	0	2	0
Food Safety	0	0	12	0
Immunization and Infectious Diseases	0	17	28	0
Injury and Violence Prevention	2	2	25	16
Maternal, Infant & Child Health	0	0	2	2
Medical Product Safety	0	0	2	2
Mental Health and Mental Disorder	0	0	0	10
Nutrition and Weight Status	3	3	4	4
Oral Health	0	0	10	4
Physical Activity	3	3	6	9
Preparedness	0	0	3	3
Public Health Infrastructure	0	0	20	18
Respiratory Diseases	0	0	1	12

Table A2 – Full Summary of Healthy People 2020 Legal Intervention Scan Results:

Topic Area	Explicit mention of law in the title	Law/policy included in the target-setting method/data/tech spec	Policymakers and Law Enforcement	Legislation
Substance Abuse	1	1	24	8
Tobacco Use	26	2	61	32
<u>Totals:</u>	36	67	276	120

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
ACCESS TO HEALTH SERVICES					
AHS -1.1	Increase the proportion of persons with medical insurance			1	
AHS -3	Increase the proportion of persons with a usual primary care provider			1	
ADOLESCENT HEALTH					
AH-7	Reduce the proportion of adolescents who have been offered, sold, or given an illegal drug on school property			1	
AH-10	Reduce the proportion of public schools with a serious violent incident			1	
AH-11.1	Reduce the rate of minor and young adult perpetration of violent crimes			1	
AH-11.2	Reduce the rate of minor and young adult perpetration of serious property crimes			1	
DISABILITY AND HEALTH					
Systems and Policies					
DH-1	Increase the number of population-based data systems used to monitor Healthy People 2020 objectives that include in their core a standardized set of questions that identify people with disabilities			1	
Environment					

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
DH-11	Increase the proportion of newly constructed and retrofitted U.S. homes and residential buildings that have visitable features			1	
DH-12.1	Reduce the number of adults with disabilities aged 22 years and older living in congregate care residences that serve 16 or more persons			1	
DH-12.2	Reduce the number of adults with disabilities aged 21 years and under living in congregate care residences			1	
Activities and Participation					
DH-15	Reduce unemployment among people with disabilities			1	
DH-16	Increase employment among people with disabilities			1	
EDUCATIONAL & COMMUNITY-BASED					
ECBP-10.1	Increase the number of community-based organizations (including local health departments, Tribal health services, nongovernmental organizations, and State agencies) providing population-based primary prevention services injury			1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
ECBP-10.2	Increase the number of community-based organizations (including local health departments, Tribal health services, nongovernmental organizations, and State agencies) providing population-based primary prevention services violence			1	
ECBP-10.3	Increase the number of community-based organizations (including local health departments, Tribal health services, nongovernmental organizations, and State agencies) providing population-based primary prevention services mental illness			1	
ECBP-10.4	Increase the number of community-based organizations (including local health departments, Tribal health services, nongovernmental organizations, and State agencies) providing population-based primary prevention services tobacco use			1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
ECBP-10.5	Increase the number of community-based organizations (including local health departments, Tribal health services, nongovernmental organizations, and State agencies) providing population-based primary prevention services substance abuse			1	
ECBP-10.6	Increase the number of community-based organizations (including local health departments, Tribal health services, nongovernmental organizations, and State agencies) providing population-based primary prevention services unintended pregnancy			1	
ECBP-10.7	Increase the number of community-based organizations (including local health departments, Tribal health services, nongovernmental organizations, and State agencies) providing population-based primary prevention services chronic disease programs			1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
ECBP-10.8	Increase the number of community-based organizations (including local health departments, Tribal health services, nongovernmental organizations, and State agencies) providing population-based primary prevention services nutrition			1	
ECBP-10.9	Increase the number of community-based organizations (including local health departments, Tribal health services, nongovernmental organizations, and State agencies) providing population-based primary prevention services physical activity			1	
ENVIRONMENTAL HEALTH					
Outdoor Air Quality					
EH-3.1	Reduce the risk of adverse health effects caused by mobile sources of airborne toxics			1	
EH-3.2	Reduce the risk of adverse health effects caused by area sources of airborne toxics			1	
EH-3.3	Reduce the risk of adverse health effects caused by major sources of airborne toxics			1	
Water Quality					

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
EH-4	Increase the proportion of persons served by community water systems who receive a supply of drinking water that meets the regulations of the Safe Drinking Water Act	1	1	1	
EH-5	Reduce waterborne disease outbreaks arising from water intended for drinking among persons served by community water systems			1	
EH-7	Increase the proportion of days that beaches are open and safe for swimming		1	1	
Toxics and Waste					
EH-8.1	Eliminate elevated blood lead levels in children			1	
EH-8.2	Reduce the mean blood lead levels in children			1	
EH-9	Minimize the risks to human health and the environment posed by hazardous sites			1	
EH-10	Reduce pesticide exposures that result in visits to a health care facility			1	
EH-11	Reduce the amount of toxic pollutants released into the environment			1	
EH-12	Increase recycling of municipal solid waste			1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
Healthy Homes and Healthy Communities					
EH-14	Increase the proportion of homes with an operating radon mitigation system for persons living in homes at risk for radon exposure		1	1	
EH-15	Increase the proportion of new single-family homes (SFH) constructed with radon-reducing features, especially in high-radon-potential areas		1	1	
EH-16.1	Increase the proportion of the Nation's elementary, middle, and high schools that have an indoor air quality management program to promote a healthy and safe physical school environment		1	1	
EH-16.2	Increase the proportion of the Nation's elementary, middle, and high schools that have a plan for how to address mold problems and promote a healthy and safe physical school environment		1	1	
EH-16.3	Increase the proportion of the Nation's elementary, middle, and high schools that have a plan for how to use, label, store, and dispose of hazardous materials to promote a healthy and safe physical school environment		1	1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
EH-16.4	Increase the proportion of the Nation's elementary, middle, and high schools that promote a healthy and safe physical school environment by using spot treatments and baiting rather than widespread application of pesticide		1	1	
EH-16.5	Increase the proportion of the Nation's elementary, middle, and high schools that promote a healthy and safe physical school environment by reducing exposure to pesticides by marking areas to be treated with pesticides		1	1	
EH-16.6	Increase the proportion of the Nation's elementary, middle, and high schools that promote a healthy and safe physical school environment by reducing exposure to pesticides by informing students and staff prior to application of the pesticide		1	1	
EH-16.7	Increase the proportion of the Nation's elementary, middle, and high schools that promote a healthy and safe physical school environment by inspecting drinking water outlets for lead		1	1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
EH-16.8	Increase the proportion of the Nation's elementary, middle, and high schools with community water systems that promote a healthy and safe physical school environment by inspecting drinking water outlets for bacteria		1	1	
EH-16.9	Increase the proportion of the Nation's elementary, middle, and high schools with community water systems that promote a healthy and safe physical school environment by inspecting drinking water outlets for coliforms		1	1	
EH-18.1	Reduce the number of U.S. homes that are found to have lead-based paint			1	
EH-18.2	Reduce the number of U.S. homes that have paint-lead hazards			1	
EH-18.3	Reduce the number of U.S. homes that have dust-lead hazards			1	
EH-18.4	Reduce the number of U.S. homes that have soil-lead hazards			1	
EH-19	Reduce the proportion of occupied housing units that have moderate or severe physical problems			1	
Infrastructure and Surveillance					

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
EH-20.1	Reduce exposure to arsenic in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.2	Reduce exposure to cadmium in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.3	Reduce exposure to lead in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.4	Reduce exposure to mercury among children aged 1 to 5 years, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.5	Reduce exposure to mercury among females aged 16 to 49 years, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.6	Reduce exposure to DDT (DDE) in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
EH-20.7	Reduce exposure to DDT (DDE) in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.8	Reduce exposure to beta-hexachlorocyclohexane (beta-HCH) in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.9	Reduce exposure to para-nitrophenol (methyl parathion and parathions) in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.10	Reduce exposure to 3,4,6-trichloro-2-pyridinol (chlorpyrifos) in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.11	Reduce exposure to 3-phenoxybenzoic acid in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
EH-20.12	Reduce exposure to PCB 153, representative of nondioxin-like PCBs, in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.13	Reduce exposure to PCB 126, representative of dioxin-like PCBs, in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.14	Reduce exposure to 1,2,3,6,7,8-hexachlorodibenzo-p-dioxin, representative of the dioxin class, in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.15	Reduce exposure to bisphenol A in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.16	Reduce exposure to perchlorate in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
EH-20.17	Reduce exposure to mono-n-butyl phthalate in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-20.18	Reduce exposure to BDE 47 (2,2',4,4'-tetrabromodiphenyl ether) in the population, as measured by blood and urine concentrations of the substance or its metabolites		1	1	
EH-21	Improve quality, utility, awareness, and use of existing information systems for environmental health			1	
EH-22.1	Increase the number of States, Territories, Tribes, and the District of Columbia that monitor diseases or conditions that can be caused by exposure to lead poisoning		1	1	
EH-22.2	Increase the number of States, Territories, Tribes, and the District of Columbia that monitor diseases or conditions that can be caused by exposure to pesticide poisoning		1	1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
EH-22.3	Increase the number of States, Territories, Tribes, and the District of Columbia that monitor diseases or conditions that can be caused by exposure to mercury poisoning		1	1	
EH-22.4	Increase the number of States, Territories, Tribes, and the District of Columbia that monitor diseases or conditions that can be caused by exposure to arsenic poisoning		1	1	
EH-22.5	Increase the number of States, Territories, Tribes, and the District of Columbia that monitor diseases or conditions that can be caused by exposure to cadmium poisoning		1	1	
EH-22.6	Increase the number of States, Territories, Tribes, and the District of Columbia that monitor diseases or conditions that can be caused by exposure to acute chemical poisoning		1	1	
EH-22.7	Increase the number of States, Territories, Tribes, and the District of Columbia that monitor diseases or conditions that can be caused by exposure to carbon monoxide poisoning		1	1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
EH-23	Reduce the number of new schools sited within 500 feet of an interstate or Federal or State highway		1	1	
FAMILY PLANNING					
FP-14	Increase the number of States that set the income eligibility level for Medicaid-covered family planning services to at least the same level used to determine eligibility for Medicaid-covered, pregnancy-related care			1	
FP-15	Increase the proportion of females in need of publicly supported contraceptive services and supplies who receive those services and supplies			1	
FOOD SAFETY					
FS-1.1	Reduce infections caused by Campylobacter species transmitted commonly through food			1	
FS-1.2	Reduce infections caused by Shiga toxin-producing Escherichia coli (STEC) O157 transmitted commonly through food			1	
FS-1.3	Reduce infections caused by Listeria monocytogenes transmitted commonly through food			1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
FS-1.4	Reduce infections caused by Salmonella species transmitted commonly through food			1	
FS-1.5	Reduce postdiarrheal hemolytic uremic syndrome (HUS) in children under 5 years of age			1	
FS-1.6	Reduce infections caused by Vibrio species transmitted commonly through food			1	
FS-1.7	Reduce infections caused by Yersinia species transmitted commonly through food			1	
FS-2.1	Reduce the number of outbreak-associated infections due to Shiga toxin-producing E. coliO157, or Campylobacter, Listeria, or Salmonella species associated with beef			1	
FS-2.2	Reduce the number of outbreak-associated infections due to Shiga toxin-producing E. coliO157, or Campylobacter, Listeria, or Salmonella species associated with dairy			1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
FS-2.3	Reduce the number of outbreak-associated infections due to Shiga toxin-producing E. coli O157, or Campylobacter, Listeria, or Salmonella species associated with fruits and nuts			1	
FS-2.4	Reduce the number of outbreak-associated infections due to Shiga toxin-producing E. coli O157, or Campylobacter, Listeria, or Salmonella species associated with leafy vegetables			1	
FS-2.5	Reduce the number of outbreak-associated infections due to Shiga toxin-producing E. coli O157, or Campylobacter, Listeria, or Salmonella species associated with poultry			1	
IMMUNIZATION AND INFECTIOUS DISEASES					
IID-1.1	Maintain elimination of cases of vaccine-preventable congenital rubella syndrome (CRS) among children under 1 year of age (U.S.-acquired cases)			1	
IID-1.2	Reduce serotype b cases of Haemophilus influenzae (Hib) invasive disease among children under age 5 years			1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
IID-1.3	Reduce new hepatitis B cases among persons aged 2 to 18 years			1	
IID-1.4	Reduce measles cases (U.S.-acquired cases)			1	
IID-1.5	Reduce cases of mumps (U.S.-acquired cases)			1	
IID-1.6	Reduce cases of pertussis among children under 1 year of age			1	
IID-1.7	Reduce cases of pertussis among adolescents aged 11 to 18 years			1	
IID-1.8	Maintain elimination of acute paralytic poliomyelitis (U.S.-acquired cases)			1	
IID-1.9	Maintain elimination of rubella (U.S.-acquired cases)			1	
IID-1.10	Reduce cases of varicella (chicken pox) among persons aged 17 years of age or under			1	
IID-10.1	Maintain the vaccination coverage level of 4 doses of diphtheria-tetanus-acellular pertussis (DTaP) vaccine for children in kindergarten		1	1	
IID-10.2	Maintain the vaccination coverage level of 2 doses of measles-mumps-rubella (MMR) vaccine for children in kindergarten		1	1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
IID-10.3	Maintain the vaccination coverage level of 3 doses of polio vaccine for children in kindergarten		1	1	
IID-10.4	Maintain the vaccination coverage level of 3 doses of hepatitis B vaccine for children in kindergarten		1	1	
IID-10.5	Maintain the vaccination coverage level of 2 doses of varicella vaccine for children in kindergarten		1	1	
IID-11.1	Increase the vaccination coverage level of 1 dose of tetanus-diphtheria-acellular pertussis (Tdap) booster vaccine for adolescents by age 13 to 15 years		1	1	
IID-11.2	Increase the vaccination coverage level of 2 doses of varicella vaccine for adolescents by age 13 to 15 years (excluding children who have had varicella)		1	1	
IID-11.3	Increase the vaccination coverage level of 1 dose meningococcal conjugate vaccine for adolescents by age 13 to 15 years		1	1	
IID-11.4	Increase the vaccination coverage level of 3 doses of human papillomavirus (HPV) vaccine for females by age 13 to 15 years		1	1	

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IID-19	Increase the number of States collecting kindergarten vaccination coverage data according to CDC minimum standards		1	1	
IID-21	Increase the number of States that use electronic data from rabies animal surveillance to inform public health prevention programs			1	
IID-24	Reduce chronic hepatitis B virus infections in infants and young children (perinatal infections)		1	1	
IID-25.1	Reduce new hepatitis B infections in adults aged 19 and older		1	1	
IID-25.2	Reduce new hepatitis B infections among high-risk populations—Injection drug users		1	1	
IID-25.3	Reduce new hepatitis B infections among high-risk populations—Men who have sex with men		1	1	
IID-26	Reduce new hepatitis C infections		1	1	
IID-29	Reduce tuberculosis (TB)		1	1	
IID-32	Increase the proportion of culture-confirmed TB patients with a positive nucleic acid amplification test (NAAT) result reported within 2 days of specimen collection		1	1	

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INJURY AND VIOLENCE PREVENTION					
Injury Prevention					
IVP-6	Increase the proportion of States and the District of Columbia with statewide emergency department data systems that routinely collect external-cause-of-injury codes for 90 percent or more of injury-related visits			1	1
IVP-7	Increase the proportion of States and the District of Columbia with statewide hospital discharge data systems that routinely collect external-cause-of-injury codes for 90 percent or more of injury-related discharges			1	1
IVP-10	Prevent an increase in nonfatal poisonings			1	
Unintentional Injury Prevention					
IVP-14	Reduce nonfatal motor vehicle crash-related injuries			1	
IVP-15	Increase use of safety belts			1	
IVP-16.1	Increase age-appropriate vehicle restraint system use in children aged 0 to 12 months			1	
IVP-16.2	Increase age-appropriate vehicle restraint system use in children aged 1 to 3 years			1	

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IVP-16.3	Increase age-appropriate vehicle restraint system use in children aged 4 to 7 years			1	
IVP-16.4	Increase age-appropriate vehicle restraint system use in children aged 8 to 12 years			1	
IVP-17	Increase the number of States and the District of Columbia with "good" graduated driver licensing (GDL) laws	1		1	
IVP-21	Increase the number of States and the District of Columbia with laws requiring bicycle helmets for bicycle riders	1		1	1
IVP-22	Increase the proportion of motorcycle operators and passengers using helmets			1	1
IVP-27.1	Increase the proportion of public and private schools that require students to wear appropriate protective gear when engaged in school-sponsored physical education		1	1	1
IVP-27.2	Increase the proportion of public and private schools that require students to wear appropriate protective gear when engaged in school-sponsored intramural activities or physical activity clubs		1	1	1
Violence Prevention					
IVP-29	Reduce homicides			1	

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IVP-30	Reduce firearm-related deaths			1	1
IVP-31	Reduce nonfatal firearm-related injuries			1	1
IVP-32	Reduce nonfatal physical assault injuries			1	1
IVP-33	Reduce physical assaults			1	1
IVP-34	Reduce physical fighting among adolescents			1	1
IVP-35	Reduce bullying among adolescents			1	1
IVP-36	Reduce weapon carrying by adolescents on school property			1	1
IVP-37	Reduce child maltreatment deaths			1	1
IVP-38	Reduce nonfatal child maltreatment			1	1
IVP-43	Increase the number of States and the District of Columbia that link data on violent deaths from death certificates, law enforcement, and coroner and medical examiner reports to inform prevention efforts at the State and local levels			1	1
MATERNAL, INFANT, & CHILD HEALTH					

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MICH-32.1	Increase the number of States and the District of Columbia that verify through linkage with vital records that all newborns are screened shortly after birth for conditions mandated by their State-sponsored screening program			1	1
MICH-32.2	Increase the proportion of screen-positive children who receive followup testing within the recommended time period			1	1
MEDICAL & PRODUCT SAFETY					
MPS-1	Increase the proportion of health care organizations that are monitoring and analyzing adverse events associated with medical therapies within their systems			1	1
MPS-2.2	Reduce the number of non-FDA-approved pain medications			1	1
MENTAL HEALTH & MENTAL DISORDER					
MHMD-5	Increase the proportion of primary care facilities that provide mental health treatment onsite or by paid referral				1
MHMD-6	Increase the proportion of children with mental health problems who receive treatment				1

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MHMD-7	Increase the proportion of juvenile residential facilities that screen admissions for mental health problems				1
MHMD-8	Increase the proportion of persons with serious mental illness (SMI) who are employed				1
MHMD-9.1	Increase the proportion of adults aged 18 years and older with serious mental illness (SMI) who receive treatment				1
MHMD-9.2	Increase the proportion of adults aged 18 years and older with major depressive episodes (MDEs) who receive treatment				1
MHMD-10	Increase the proportion of persons with co-occurring substance abuse and mental disorders who receive treatment for both disorders				1
MHMD-11.1	Increase the proportion of primary care physicians who screen adults aged 19 years and older for depression during office visits				1
MHMD-11.2	Increase the proportion of primary care physicians who screen youth aged 12 to 18 years for depression during office visits				1

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MHMD-12	Increase the proportion of homeless adults with mental health problems who receive mental health services				1
NUTRITION AND WEIGHT STATUS					
Healthier Food Access					
NWS-1	Increase the number of States with nutrition standards for foods and beverages provided to preschool-aged children in child care	1	1	1	1
NWS-2.1	Increase the proportion of schools that do not sell or offer calorically sweetened beverages to students			1	1
NWS-2.2	Increase the proportion of school districts that require schools to make fruits or vegetables available whenever other food is offered or sold	1	1	1	
NWS-3	Increase the number of States that have State-level policies that incentivize food retail outlets to provide foods that are encouraged by the Dietary Guidelines for Americans	1		1	
Food Security					
NWS-12	Eliminate very low food security among children		1		1
NWS-13	Reduce household food insecurity and in doing so reduce hunger				1

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ORAL HEALTH					
Access to Preventive Services					
OH-7	Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year			1	
OH-8	Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year			1	
OH-9.1	Increase the proportion of school-based health centers with an oral health component that includes dental sealants			1	
OH-9.2	Increase the proportion of school-based health centers with an oral health component that includes dental care			1	
OH-9.3	Increase the proportion of school-based health centers with an oral health component that includes topical fluoride			1	
OH-10.1	Increase the proportion of Federally Qualified Health Centers (FQHCs) that have an oral health care program			1	1
OH-10.2	Increase the proportion of local health departments that have oral health prevention or care programs			1	1

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OH-11	Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers (FQHCs) each year			1	
Oral Health Interventions					
OH-13	Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water			1	1
Monitoring, Surveillance Systems					
OH-16	Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system			1	1
PHYSICAL ACTIVITY					
PA-4.1	Increase the proportion of the Nation's public and private elementary schools that require daily physical education for all students			1	1
PA-4.2	Increase the proportion of the Nation's public and private middle and junior high schools that require daily physical education for all students			1	1
PA-4.3	Increase the proportion of the Nation's public and private senior high schools that require daily physical education for all students			1	1

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PA-6.1	Increase the number of States that require regularly scheduled elementary school recess		1	1	1
PA-6.2	Increase the proportion of school districts that require regularly scheduled elementary school recess		1	1	1
PA-7	Increase the proportion of school districts that require or recommend elementary school recess for an appropriate period of time		1	1	1
PA-9.1	Increase the number of States with licensing regulations for physical activity in child care that require activity programs providing large muscle or gross motor activity, development, and/or equipment	1			1
PA-9.2	Increase the number of States with licensing regulations for physical activity in child care that require children to engage in vigorous or moderate physical activity	1			1
PA-9.3	Increase the number of States with licensing regulations for physical activity in child care that require a number of minutes of physical activity per day or by length of time in care	1			1
PREPAREDNESS					

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Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
PREP-2	Reduce the time necessary to activate designated personnel in response to a public health emergency			1	1
PREP-3.2	Increase the proportion of LRN chemical laboratories that meet proficiency standards for chemical threat agents			1	1
PREP-4	Reduce the time for State public health agencies to establish after action reports and improvement plans following responses to public health emergencies and exercises			1	1
PUBLIC HEALTH INFRASTRUCTURE					
Workforce					
PHI-1.4	Increase the proportion of local public health agencies that incorporate Core Competencies for Public Health Professionals into job descriptions and performance evaluations			1	
Data and Information Systems					
PHI-10.1	Increase the number of States that record vital events using the latest U.S. standard certificate of birth			1	1
PHI-10.2	Increase the number of States that record vital events using the latest U.S. standard certificate of death			1	1

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PHI-10.3	Increase the number of States that record vital events using the latest U.S. standard report of fetal death			1	1
Public Health Organizations					
PHI-11.1	Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services to support disease prevention, control, and surveillance			1	1
PHI-11.2	Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services that incorporate integrated data management			1	1
PHI-11.3	Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services that support reference and specialized testing			1	1
PHI-11.4	Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services in support of environmental health and protection			1	1

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PHI-11.5	Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services in support of environmental health and protection			1	1
PHI-11.6	Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services that advance laboratory improvement and regulation			1	1
PHI-11.7	Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services that support policy development			1	1
PHI-11.8	Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services in support of emergency response			1	1
PHI-11.9	Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services in support of public health-related research			1	1

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PHI-11.10	Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services that support training and education			1	1
PHI-11.11	Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services that foster partnerships and communication			1	1
PHI-13.1	Increase the proportion of State epidemiologists with formal training in epidemiology in State public health agencies			1	
PHI-13.3	Increase the proportion of State public health agencies that provide or assure comprehensive epidemiology services to support essential public health services			1	1
PHI-13.4	Increase the proportion of local public health agencies that provide or assure comprehensive epidemiology services to support essential public health services			1	1

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PHI-14.1	Increase the proportion of State public health systems that conduct a public health system assessment using national performance standards			1	1
PHI-14.2	Increase the proportion of local public health systems that conduct a public health system assessment using national performance standards			1	1
RESPIRATORY DISEASES					
Asthma					
RD-1.1	Reduce asthma deaths among children and adults under age 35 years				1
RD-1.2	Reduce asthma deaths among adults aged 35 to 64 years old				1
RD-1.3	Reduce asthma deaths among adults aged 65 years and older				1
RD-2.1	Reduce hospitalizations for asthma among children under age 5 years				1
RD-2.2	Reduce hospitalizations for asthma among children and adults aged 5 to 64 years				1
RD-2.3	Reduce hospitalizations for asthma among adults aged 65 years and older				1
RD-3.1	Reduce emergency department (ED) visits for asthma among children under age 5 years				1

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RD-3.2	Reduce emergency department (ED) visits for asthma among children and adults aged 5 to 64 years				1
RD-3.3	Reduce emergency department (ED) visits for asthma among adults aged 65 years and older				1
RD-8	Increase the number of States, Territories, and the District of Columbia with a comprehensive asthma surveillance system for tracking asthma cases, illness, and disability at the State level			1	
RD-10	Reduce deaths from chronic obstructive pulmonary disease (COPD) among adults				1
RD-11	Reduce hospitalizations for chronic obstructive pulmonary disease (COPD)				1
RD-12	Reduce emergency department (ED) visits for chronic obstructive pulmonary disease (COPD)				1
SUBSTANCE ABUSE					
Policy and Prevention					
SA-1	Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol			1	

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SA-2.1	Increase the proportion of at risk adolescents aged 12 to 17 years who, in the past year, refrained from using alcohol for the first time			1	
SA-2.2	Increase the proportion of at risk adolescents aged 12 to 17 years who, in the past year, refrained from using marijuana for the first time			1	
SA-2.3	Increase the proportion of high school seniors never using substances—Alcoholic beverages			1	
SA-2.4	Increase the proportion of high school seniors never using substances—Illicit drugs			1	
SA-6	Increase the number of States with mandatory ignition interlock laws for first and repeat impaired driving offenders in the United States	1			1
Screening and Treatment					
SA-10	Increase the number of Level I and Level II trauma centers and primary care settings that implement evidence-based alcohol Screening and Brief Intervention (SBI)			1	1
Epidemiology and Surveillance					
SA-12	Reduce drug-induced deaths			1	

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SA-13.1	Reduce the proportion of adolescents reporting use of alcohol or any illicit drugs during the past 30 days			1	
SA-13.2	Reduce the proportion of adolescents reporting use of marijuana during the past 30 days			1	
SA-13.3	Reduce the proportion of adults reporting use of any illicit drug during the past 30 days			1	
SA-14.1	Reduce the proportion of students engaging in binge drinking during the past 2 weeks—high school seniors			1	
SA-14.2	Reduce the proportion of students engaging in binge drinking during the past 2 weeks—college students			1	
SA-14.3	Reduce the proportion of persons engaging in binge drinking during the past 30 days—adults aged 18 years and older			1	
SA-14.4	Reduce the proportion of persons engaging in binge drinking during the past month—adolescents aged 12 to 17 years			1	
SA-17	Decrease the rate of alcohol-impaired driving (.08+ blood alcohol content [BAC]) fatalities		1		1

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SA-18.1	Reduce steroid use among 8th graders			1	
SA-18.2	Reduce steroid use among 10th graders			1	
SA-18.3	Reduce steroid use among 12th graders			1	
SA-19.1	Reduce the past-year nonmedical use of pain relievers			1	1
SA-19.2	Reduce the past-year nonmedical use of tranquilizers			1	1
SA-19.3	Reduce the past-year nonmedical use of stimulants			1	1
SA-19.4	Reduce the past-year nonmedical use of sedatives			1	1
SA-19.5	Reduce the past-year nonmedical use of any psychotherapeutic drug (including pain relievers, tranquilizers, stimulants, and sedatives)			1	1
SA-20	Reduce the number of deaths attributable to alcohol			1	
SA-21	Reduce the proportion of adolescents who use inhalants			1	
TOBACCO USE					
Tobacco Use					
TU-1.1	Reduce cigarette smoking by adults			1	
TU-1.2	Reduce use of smokeless tobacco products by adults			1	

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TU-1.3	Reduce use of cigars by adults			1	
TU-2.1	Reduce use of tobacco products by adolescents (past month)			1	
TU-2.2	Reduce use of cigarettes by adolescents (past month)			1	
TU-2.3	Reduce use of smokeless tobacco products by adolescents (past month)			1	
TU-2.4	Reduce use of cigars by adolescents (past month)			1	
TU-3.1	Reduce the initiation of the use of tobacco products among children and adolescents aged 12 to 17 years			1	
TU-3.2	Reduce the initiation of the use of cigarettes among children and adolescents aged 12 to 17 years			1	
TU-3.3	Reduce the initiation of the use of smokeless tobacco products by children and adolescents aged 12 to 17 years			1	
TU-3.4	Reduce the initiation of the use of cigars by children and adolescents aged 12 to 17 years			1	
TU-3.5	Reduce the initiation of the use of tobacco products by young adults aged 18 to 25 years			1	

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TU-3.6	Reduce the initiation of the use of cigarettes by young adults aged 18 to 25 years			1	
TU-3.7	Reduce the initiation of the use of smokeless tobacco products by young adults aged 18 to 25 years			1	
TU-3.8	Reduce the initiation of the use of cigars by young adults aged 18 to 25 years			1	
TU-4.1	Increase smoking cessation attempts by adult smokers			1	
TU-5.1	Increase recent smoking cessation success by adult smokers			1	
TU-6	Increase smoking cessation during pregnancy			1	
TU-7	Increase smoking cessation attempts by adolescent smokers			1	
Health Systems Changes					
TU-8	Increase comprehensive Medicaid insurance coverage of evidence-based treatment for nicotine dependency in States and the District of Columbia	1		1	1
TU-9.1	Increase tobacco screening in office-based ambulatory care settings			1	
TU-9.2	Increase tobacco screening in hospital ambulatory care settings			1	

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TU-9.3	Increase tobacco screening in dental care settings			1	
TU-10.1	Increase tobacco cessation counseling in office-based ambulatory care settings			1	
TU-10.2	Increase tobacco cessation counseling in hospital ambulatory care settings			1	
TU-10.3	Increase tobacco cessation counseling in dental care settings			1	
Social and Environmental Changes					
TU-11.1	Reduce the proportion of children aged 3 to 11 years exposed to secondhand smoke			1	
TU-11.2	Reduce the proportion of adolescents aged 12 to 17 years exposed to secondhand smoke			1	1
TU-11.3	Reduce the proportion of adults aged 18 years and older exposed to secondhand smoke			1	1
TU-12	Increase the proportion of persons covered by indoor worksite policies that prohibit smoking	1			1
TU-13.1	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in private worksites	1		1	1

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TU-13.2	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in public worksites	1		1	1
TU-13.3	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in restaurants	1		1	1
TU-13.4	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in bars	1		1	1
TU-13.5	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in gaming halls	1		1	1
TU-13.6	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in commercial daycare centers	1		1	1
TU-13.7	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in home-based daycare centers	1		1	1
TU-13.8	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in public transportation	1		1	1

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TU-13.9	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in hotels and motels	1		1	1
TU-13.10	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in multiunit housing	1		1	1
TU-13.11	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in vehicles with children	1		1	1
TU-13.12	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in prisons and correctional facilities	1		1	1
TU-13.13	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in substance abuse treatment facilities	1		1	1
TU-13.14	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in mental health treatment facilities	1		1	1

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TU-13.15	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking in entrances and exits of all public places	1		1	1
TU-13.16	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking on hospital campuses	1		1	1
TU-13.17	Establish laws in States and the District of Columbia on smoke-free indoor air that prohibit smoking on college and university campuses	1		1	1
TU-14	Increase the proportion of smoke-free homes			1	
TU-15.1	Increase tobacco-free environments in junior high schools, including all school facilities, property, vehicles, and school events			1	
TU-15.2	Increase tobacco-free environments in middle schools, including all school facilities, property, vehicles, and school events			1	
TU-15.3	Increase tobacco-free environments in high schools, including all school facilities, property, vehicles, and school events			1	

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
TU-16.1	Eliminate State laws that preempt stronger local tobacco control laws on smoke-free indoor air	1		1	1
TU-16.2	Eliminate State laws that preempt stronger local tobacco control laws on advertising	1		1	1
TU-16.3	Eliminate State laws that preempt stronger local tobacco control laws on youth access	1		1	1
TU-17.1	Increase the Federal and State tax on cigarettes	1	1	1	1
TU-17.2	Increase the Federal and State tax on smokeless tobacco products	1	1	1	1
TU-18.1	Reduce the proportion of adolescents and young adults in grades 6 through 12 who are exposed to tobacco marketing on the Internet			1	1
TU-18.2	Reduce the proportion of adolescents and young adults in grades 6 through 12 who are exposed to tobacco marketing in magazines and newspapers			1	1
TU-18.3	Reduce the proportion of adolescents and young adults in grades 6 through 12 who are exposed to tobacco marketing in movies and television			1	1

Table A3 – Detailed Healthy People 2020 Legal Intervention Scan Results:

Objective Number	Text of Objective	Law explicitly mentioned in objective title	Law included in the target-setting method/data/tech spec for the objective, but not mentioned in the title	"Policymaker and law enforcement" search return	"Legislation" search return
TU-18.4	Reduce the proportion of adolescents and young adults in grades 6 through 12 who are exposed to tobacco marketing at point of purchase			1	1
TU-19.1	Reduce the illegal sales rate to minors through enforcement of laws prohibiting the sale of tobacco products to minors in States and the District of Columbia	1		1	1
TU-19.2	Reduce the illegal sales rate to minors through enforcement of laws prohibiting the sale of tobacco products to minors in Territories	1		1	1
	<u>Totals:</u>	36	67	276	120

Table A4 – Winnable Battles Legal Intervention Scan Results:

Policy area	Legal action/intervention	Description	Source
Food Safety	Require that kitchen managers receive food safety certifications	Foodborne Illness Surveillance systems are listed as a resource on CDC's main food safety Winnable Battles page. On this page, contributing factor surveillance conducted by EHS-net is listed.	http://www.cdc.gov/winnablebattles/foodsafety/index.html , http://www.cdc.gov/nceh/ehs/EHSNet/Docs/JFP_Certified_Kitchen_MGRs.pdf , http://ageconsearch.umn.edu/bitstream/18177/1/st02sc01.pdf
Food Safety	Track and assist with multistate foodborne illnesses/provide FDA with precise estimates of foodborne illnesses and deaths	Listed in a policy brief showing how CDC actions guided regulatory changes	http://www.cdc.gov/winnablebattles/foodsafety/pdf/foodsafety_wb_policy_brief.pdf
Food Safety	Require private food suppliers to conduct surveillance of deadly microbes	Listed in a policy brief showing how CDC actions guided regulatory changes	http://www.cdc.gov/winnablebattles/foodsafety/pdf/foodsafety_wb_policy_brief.pdf
Food Safety	Require more selective use of antimicrobials on farms based on evidence gathered by the CDC	Listed in a policy brief showing how CDC actions guided regulatory changes	http://www.cdc.gov/winnablebattles/foodsafety/pdf/foodsafety_wb_policy_brief.pdf
Food Safety	Add cut tomatoes to regulatory lists defining potentially hazardous substances	Listed in a policy brief showing how CDC actions guided regulatory changes	http://www.cdc.gov/winnablebattles/foodsafety/pdf/foodsafety_wb_policy_brief.pdf
Food Safety	Require meat grinding safety plans with rules like separating different meats to avoid potential cross contamination with deadly microbes	Listed in a policy brief showing how CDC actions guided regulatory changes	http://www.cdc.gov/winnablebattles/foodsafety/pdf/foodsafety_wb_policy_brief.pdf
Food Safety	Require the labeling of raw foods to alert consumers of potential contamination or infection	Listed in a policy brief showing how CDC actions guided regulatory changes	http://www.cdc.gov/winnablebattles/foodsafety/pdf/foodsafety_wb_policy_brief.pdf

Table A4 – Winnable Battles Legal Intervention Scan Results:

Policy area	Legal action/intervention	Description	Source
Food Safety	Require meat inspection guidelines that include regular testing and monitoring for deadly microbes	Listed in a policy brief showing how CDC actions guided regulatory changes	http://www.cdc.gov/winnablebattles/foodsafety/pdf/foodsafety_wb_policy_brief.pdf
Food Safety	Include nontyphoidal Salmonella as a reportable disease for restaurant managers	Listed under the section: Changing Policies CDC research and funding have spurred the adoption of evidence-based practices	http://www.cdc.gov/nceh/ehs/Docs/Factsheets/food-safety-eph-practice-wb.pdf
Food Safety	Update FDA's Food Code with recommendations for exclusion and restriction of food workers diagnosed with foodborne illnesses	Listed under the section: Changing Policies CDC research and funding have spurred the adoption of evidence-based practices	http://www.cdc.gov/nceh/ehs/Docs/Factsheets/food-safety-eph-practice-wb.pdf
Food Safety	Enforce the Food Safety Modernization Act and regulations thereunder	Included in a document outlining activities the CDC must statutorily undertake related to current laws	http://www.cdc.gov/nceh/ehs/Docs/Factsheets/food-safety-eph-practice-wb.pdf
Food Safety	Adopt and enforce proven food safety laws and regulations	Listed under the section: "What Can Be Done Government can: Implement policies and regulations"	http://www.cdc.gov/vitalsigns/FoodSafety/ , http://www.cdc.gov/winnablebattles/foodsafety/pdf/foodsafety_wb_at_a_glance.pdf
Motor Vehicle Safety	Enact comprehensive Graduated Driver Licensing (GDL) systems and parental monitoring	Listed as a "Key action" that can be taken	http://www.cdc.gov/winnablebattles/targets/pdf/winnablebattlestargets.pdf , http://www.cdc.gov/winnablebattles/motorvehicleinjury/pdf/motor_vehicle_wb_letter.pdf , http://www.cdc.gov/winnablebattles/motorvehicleinjury/ppt/motor_vehicle_wb_ppt.pptx

Table A4 – Winnable Battles Legal Intervention Scan Results:

Policy area	Legal action/intervention	Description	Source
Motor Vehicle Safety	Adopt ignition interlock programs	Letter from Thomas R. Frieden on motor vehicle injury and the CDC's specific focus	http://www.cdc.gov/winnablebattles/motorvehicleinjury/pdf/motor_vehicle_wb_letter.pdf , http://www.cdc.gov/winnablebattles/targets/pdf/winnablebattlestargets.pdf , http://www.cdc.gov/vitalsigns/DrinkingAndDriving/index.html , http://www.cdc.gov/winnablebattles/motorvehicleinjury/ppt/motor_vehicle_wb_ppt.pptx
Motor Vehicle Safety	Deploy sobriety checkpoints	Letter from Thomas R. Frieden on motor vehicle injury and the CDC's specific focus	http://www.cdc.gov/winnablebattles/motorvehicleinjury/pdf/motor_vehicle_wb_letter.pdf , http://www.cdc.gov/winnablebattles/targets/pdf/winnablebattlestargets.pdf , http://www.cdc.gov/vitalsigns/DrinkingAndDriving/index.html
Motor Vehicle Safety	Adopt zero tolerance laws for drinking and driving	Letter from Thomas R. Frieden on motor vehicle injury and the CDC's specific focus	http://www.cdc.gov/winnablebattles/motorvehicleinjury/pdf/motor_vehicle_wb_letter.pdf , http://www.cdc.gov/winnablebattles/targets/pdf/winnablebattlestargets.pdf , http://www.cdc.gov/vitalsigns/DrinkingAndDriving/index.html , http://www.cdc.gov/vitalsigns/TeenDrinkingAndDriving/ , http://www.cdc.gov/winnablebattles/motorvehicleinjury/ppt/motor_vehicle_wb_ppt.pptx
Motor Vehicle Safety	Require the primary enforcement of seatbelt laws	Letter from Thomas R. Frieden on motor vehicle injury and the CDC's specific focus	http://www.cdc.gov/winnablebattles/motorvehicleinjury/pdf/motor_vehicle_wb_letter.pdf , http://www.cdc.gov/winnablebattles/motorvehicleinjury/ppt/motor_vehicle_wb_ppt.pptx

Table A4 – Winnable Battles Legal Intervention Scan Results:

Policy area	Legal action/intervention	Description	Source
Motor Vehicle Safety	Increase alcohol taxes	Under the heading "What Can Be Done, States can:"	http://www.cdc.gov/vitalsigns/DrinkingAndDriving/index.html
Motor Vehicle Safety	Adopt seat belt laws that apply to everyone in the car	Under the heading "What Can Be Done, States can:"	http://www.cdc.gov/vitalsigns/SeatBeltUse/index.html
Motor Vehicle Safety	Ensure that fines for not wearing a seat belt are high enough to be effective	Under the heading "What Can Be Done, States can:"	http://www.cdc.gov/vitalsigns/SeatBeltUse/index.html
Nutrition, Physical Activity, & Obesity	Improve physical education laws in schools	Described under the "Success Stories" heading	http://www.cdc.gov/chronicdisease/resources/publications/aag/dash.htm
Nutrition, Physical Activity, & Obesity	Adopt nutrition standards for food and beverages sold in schools	Described under the "Success Stories" heading	http://www.cdc.gov/chronicdisease/resources/publications/aag/dash.htm , http://www.cdc.gov/winnablebattles/obesity/ppt/obesity__winnablebattles.pptx
Nutrition, Physical Activity, & Obesity	Require health education courses in order to graduate from high school	Described under the "Success Stories" heading	http://www.cdc.gov/chronicdisease/resources/publications/aag/dash.htm
Nutrition, Physical Activity, & Obesity	Set statewide maternity care quality standards for hospitals to support breastfeeding	Under the heading "What Can Be Done, State and local government can:"	http://www.cdc.gov/vitalsigns/Breastfeeding/index.html

Table A4 – Winnable Battles Legal Intervention Scan Results:

Policy area	Legal action/intervention	Description	Source
Nutrition, Physical Activity, & Obesity	Include breastfeeding in early care and education (ECE) licensing regulations	Under the "Key Considerations" section for supporting breastfeeding in early care and education (ECE) programs. These include prekindergarten, Head Start, child care centers, and in-home care.	http://www.cdc.gov/breastfeeding/pdf/Strategy6-Support-Breastfeeding-Early-Care.pdf , http://www.cdc.gov/winnablebattles/obesity/ppt/obesity__winnablebattles.pptx
Nutrition, Physical Activity, & Obesity	Enact policies supporting breastfeeding in worksites	Presentation on obesity, nutrition, and physical activity	http://www.cdc.gov/winnablebattles/obesity/ppt/obesity__winnablebattles.pptx
Nutrition, Physical Activity, & Obesity	Enact standards reducing sodium in government facilities and educational institutions	Presentation on obesity, nutrition, and physical activity	http://www.cdc.gov/winnablebattles/obesity/ppt/obesity__winnablebattles.pptx , http://www.cdc.gov/vitalsigns/Sodium/index.html
Nutrition, Physical Activity, & Obesity	Adopt policies that promote bicycling and public transportation	Under the heading "What Can Be Done, States can:"	http://www.cdc.gov/vitalsigns/AdultObesity/index.html
Teen Pregnancy	Expand the reach of Medicaid family planning services	Listed as a "Key action" that can be taken	http://www.cdc.gov/winnablebattles/targets/pdf/winnablebattlestargets.pdf , http://www.cdc.gov/winnablebattles/teenpregnancy/ppt/teenpregnancy__winnablebattles.pptx
Teen Pregnancy	Statewide guidelines for sex education that include information on contraception and abstinence	Under the heading "Past Programs Have Shown Success", this section gives an example of when the efforts it funded changed policy in a state	http://www.cdc.gov/chronicdisease/resources/publications/aag/teen-preg.htm
Teen Pregnancy	Laws requiring sex education programs to be effective, medically accurate, and proven effective	Under the heading "Past Programs Have Shown Success", this section gives an example of when the efforts it funded changed policy in a state	http://www.cdc.gov/chronicdisease/resources/publications/aag/teen-preg.htm , http://www.cdc.gov/winnablebattles/teenpregnancy/ppt/teenpregnancy__winnablebattles.pptx

Table A4 – Winnable Battles Legal Intervention Scan Results:

Policy area	Legal action/intervention	Description	Source
Tobacco Use	Increase the unit price of tobacco products through tax increases	This is a specific statement made by CDC in relation to other specific actions states can take under the heading "The Tobacco Use Epidemic Can Be Stopped"	http://www.cdc.gov/chronicdisease/resources/publications/aag/osh.htm , http://www.cdc.gov/winnablebattles/tobacco/ppt/tobacco_wb_presentation.pptx , http://www.cdc.gov/vitalsigns/AdultSmoking/index.html
Tobacco Use	Enact smoke-free policies, regulations, and laws	This is a specific statement made by CDC in relation to other specific actions states can take under the heading "The Tobacco Use Epidemic Can Be Stopped"	http://www.cdc.gov/chronicdisease/resources/publications/aag/osh.htm , http://www.cdc.gov/winnablebattles/targets/pdf/winnablebattlestargets.pdf , http://www.cdc.gov/winnablebattles/tobacco/ppt/tobacco_wb_presentation.pptx , http://www.cdc.gov/vitalsigns/AdultSmoking/index.html
Tobacco Use	Require insurance companies cover the cost of tobacco-use treatment in health insurance plans	This is a specific statement made by CDC in relation to other specific actions states can take under the heading "The Tobacco Use Epidemic Can Be Stopped"	http://www.cdc.gov/chronicdisease/resources/publications/aag/osh.htm
Tobacco Use	Enact and enforce laws to limit minors' access to tobacco products	This is a specific statement made by CDC in relation to other specific actions states can take under the heading "The Tobacco Use Epidemic Can Be Stopped"	http://www.cdc.gov/chronicdisease/resources/publications/aag/osh.htm
Tobacco Use	Enact laws requiring CDC-recommended levels of funding for anti-smoking programs	Letter from Thomas R. Frieden on tobacco use	http://www.cdc.gov/winnablebattles/tobacco/pdf/tobacco_wb_letter.pdf , http://www.cdc.gov/winnablebattles/tobacco/ppt/tobacco_wb_presentation.pptx
Tobacco Use	Enact and enforce the Family Smoking Prevention and Tobacco Control Act	Presentation on tobacco control	http://www.cdc.gov/winnablebattles/tobacco/ppt/tobacco_wb_presentation.pptx

Table A4 – Winnable Battles Legal Intervention Scan Results:

Policy area	Legal action/intervention	Description	Source
Tobacco Use	Enact and enforce the Prevent All Cigarette Trafficking Act	Presentation on tobacco control	http://www.cdc.gov/winnablebattles/tobacco/ppt/tobacco_wb_presentation.pptx
Healthcare-Associated Infections	Enact laws requiring states to publicly report some healthcare-associated infections	Presentation on HAI impacts and prevention efforts	http://www.cdc.gov/winnablebattles/healthcareassociatedinfections/pdf/haiwinnablebattle_presentation.pptx
Healthcare-Associated Infections	Enact national law or regulation requiring mandatory healthcare-associated infections reporting across entire U.S.	Presentation on HAI impacts and prevention efforts	http://www.cdc.gov/winnablebattles/healthcareassociatedinfections/pdf/haiwinnablebattle_presentation.pptx
Healthcare-Associated Infections	Enact law tying healthcare-associated infections prevention to Medicare/Medicaid payments	Presentation on HAI impacts and prevention efforts	http://www.cdc.gov/winnablebattles/healthcareassociatedinfections/pdf/haiwinnablebattle_presentation.pptx
Healthcare-Associated Infections	Including in the Affordable Care Act incentive payments to hospitals that meet healthcare-associated infections performance standards	Presentation on HAI impacts and prevention efforts	http://www.cdc.gov/winnablebattles/healthcareassociatedinfections/pdf/haiwinnablebattle_presentation.pptx

Table A5 – Prevention Status Reports Legal Intervention Scan Results:

PSR Health Topic	Legal Intervention	Source for Legal Intervention	Measure	Source	Date Legal Data Last Updated
Excessive Alcohol Use	State beer excise tax	Community Guide	Law	APIS	APIS data goes to 1st quarter 2013; PSR goes to 1/1/2012
Excessive Alcohol Use	State distilled spirits excise tax	Community Guide	Law	APIS	APIS data goes to 1st quarter 2013; PSR goes to 1/1/2012
Excessive Alcohol Use	State wine excise tax	Community Guide	Law	APIS	APIS data goes to 1st quarter 2013; PSR goes to 1/1/2012
Excessive Alcohol Use	Commercial host (dram shop) liability laws	Community Guide	Law	Not stated	1/1/2011
Excessive Alcohol Use	Local authority to regulate alcohol outlet density	Community Guide	Law	Not stated	1/1/2012
Motor Vehicle Injuries	Primary enforcement of seat belt law	Community Guide	Law	Not stated	8/1/2013
Motor Vehicle Injuries	Child passenger restraint law	Community Guide	Law	Not stated	8/1/2013
Motor Vehicle Injuries	Graduated driver licensing	NHTSA, DOT, literature	Law	IIHS	8/1/2013 (IIHS current)
Motor Vehicle Injuries	Ignition interlocks	Community Guide	Law	Multiple	8/1/2013 (IIHS current)
Food Safety	NONE				
Nutrition, Physical	[Policies regulating] secondary	IOM, CDC Recommendations	Survey	Not stated	2007?

Table A5 – Prevention Status Reports Legal Intervention Scan Results:

PSR Health Topic	Legal Intervention	Source for Legal Intervention	Measure	Source	Date Legal Data Last Updated
Activity and Obesity	schools not selling less nutritious foods and beverages				
Nutrition, Physical Activity and Obesity	State nutrition standards policy for foods and beverages sold or provided by state government agencies	IOM	Law or Regulation	PHLP	November, 2012
Nutrition, Physical Activity and Obesity	Inclusion of nutrition and physical activity standards in state regulations of licensed childcare facilities	IOM & other expert groups	Law or Regulation	Report	2012?
Nutrition, Physical Activity and Obesity	State physical education time requirement for high school students	Community Guide	Law, Regulation or Policy	Report	2012?
HAIs	NONE				
Prescription Drug Overdose	State pain clinic law	ONDCP	Law	NAMSDL	PSR, July, 2013; NAMSDL, 8/20/2013

Table A5 – Prevention Status Reports Legal Intervention Scan Results:

PSR Health Topic	Legal Intervention	Source for Legal Intervention	Measure	Source	Date Legal Data Last Updated
Prescription Drug Overdose	Prescription drug management programs following best practices	None stated	PDMP following best practices	PDMPTTAC	July, 2013
Heart disease and stroke	Pharmacist collaborative drug therapy management policy	Community Guide	Law, Regulation or Policy	Not stated	12/31/2012
Teenage Pregnancy	Expansion of state Medicaid family planning eligibility	HP 2020	Regulation or Policy	Medicaid.Gov	August, 2013
HIV	State Medicaid reimbursement for routine HIV screening	CDC/USPSTF	Reimbursement	KFF.Org	PSR, 1/1/2013; KFF 2/25/14
HIV	State HIV testing laws [consistent with CDC 2006 recommendations]	CDC/2010 AIDS Strategy	Laws	CDC	PSR, 7/13; CDC source 10/30/2013
HIV	Reporting of CD4 and HIV viral load data to state HIV surveillance program	2010 AIDS Strategy	Law, Regulation or Policy	CDC	PSR, 7/13; CDC source 10/30/2013

Table A5 – Prevention Status Reports Legal Intervention Scan Results:

PSR Health Topic	Legal Intervention	Source for Legal Intervention	Measure	Source	Date Legal Data Last Updated
Tobacco use	State cigarette excise tax	HP 2020	Law	Not stated	6/30/2013
Tobacco use	Comprehensive state smoke-free policy	HP 2020	Law	Not stated	6/30/2013

Table A6 – Community Guide for Preventive Services Legal Intervention Scan Results:

Topic	Recommendation/Legal Intervention	Date Recommended	Further Specificity from the Topic's Page
Improving Adolescent Health	Preventing excessive alcohol consumption: enhanced enforcement of laws prohibiting sales to minors	Feb-06	
Improving Adolescent Health	Reducing alcohol-impaired driving: lower BAC laws for young or inexperienced drivers	Jun-00	
Improving Adolescent Health	Reducing alcohol-impaired driving: maintaining current minimum legal drinking age	Aug-00	
Improving Adolescent Health	Restricting minors' access to tobacco products: community mobilization with additional interventions	Jun-01	[S]tronger restrictions on retailer sales of tobacco products; restrictions directed at youth purchase, possession, or use; active enforcement of tobacco sales laws; and retailer education interventions (with or without reinforcement).
Improving Adolescent Health	Violence prevention: policies facilitating the transfer of juveniles to adult justice systems	Apr-03 [Recommended against]	
Preventing Excessive Alcohol Consumption	Dram shop liability	Mar-10	
Preventing Excessive Alcohol Consumption	Increasing alcohol taxes	Jun-07	
Preventing Excessive Alcohol Consumption	Maintaining limits on days of sale	Jun-08	

Table A6 – Community Guide for Preventive Services Legal Intervention Scan Results:

Topic	Recommendation/Legal Intervention	Date Recommended	Further Specificity from the Topic's Page
Preventing Excessive Alcohol Consumption	Maintaining limits on hours of sale	Feb-09	
Preventing Excessive Alcohol Consumption	Privatization of retail alcohol sales	Apr-11 [Recommended against]	
Preventing Excessive Alcohol Consumption	Regulation of alcohol outlet density	Feb-07	
Improving Mental Health and Addressing Mental Illness	Mental health benefits legislation	Aug-12	
Motor Vehicle-Related Injury Prevention: Use of Child Safety Seats	Laws mandating use	Jun-98	
Motor Vehicle-Related Injury Prevention: Use of Motorcycle Helmets	Universal helmet laws	Aug-13	
Motor Vehicle-Related Injury Prevention: Use of Safety Belts	Laws mandating use	Oct-00	
Motor Vehicle-Related Injury Prevention: Use of Safety Belts	Primary (vs. secondary) enforcement laws	Oct-00	
Motor Vehicle-Related Injury Prevention: Reducing Alcohol-Impaired Driving	0.08% blood alcohol concentration (BAC) laws	Aug-00	
Motor Vehicle-Related Injury Prevention: Reducing Alcohol-Impaired Driving	Lower BAC laws for young or inexperienced drivers*	Jun-00	
Motor Vehicle-Related Injury Prevention: Reducing Alcohol-Impaired Driving	Maintaining current minimum legal drinking age (MLDA) laws†	Aug-00	
Motor Vehicle-Related Injury Prevention: Reducing Alcohol-Impaired Driving	Publicized sobriety checkpoint programs	Aug-12	

* Note that this intervention also appears in the “Improving Adolescent Health” category and is not counted in the final total of explicit legal interventions that appear in the Community Guide for Preventive Services.

† Note that this intervention also appears in the “Improving Adolescent Health” category and is not counted in the final total of explicit legal interventions that appear in the Community Guide for Preventive Services.

Table A6 – Community Guide for Preventive Services Legal Intervention Scan Results:

Topic	Recommendation/Legal Intervention	Date Recommended	Further Specificity from the Topic's Page
Motor Vehicle-Related Injury Prevention: Reducing Alcohol-Impaired Driving	Ignition interlocks	Apr-06	
Obesity Prevention and Control	Worksite programs	Feb-07	Policy strategies may also change rules and procedures for employees such as health insurance benefits or costs or money for health club membership.
Preventing Dental Caries	Community water fluoridation	Apr-13	
Increasing Physical Activity: Environmental and Policy Approaches	Community-scale urban design and land use policies	Jun-04	
Increasing Physical Activity: Environmental and Policy Approaches	Creation of or enhanced access to places for physical activity combined with informational outreach activities	May-01	
Increasing Physical Activity: Environmental and Policy Approaches	Street-scale urban design and land use policies	Jun-04	
Increasing Physical Activity: Environmental and Policy Approaches	Point-of-decision prompts to encourage use of stairs	Jun-05	
Increasing Appropriate Vaccination	Vaccination requirements for child care, school and college attendance	Jun-09	
Increasing Appropriate Vaccination	Standing orders	Jun-08	
Reducing Tobacco Use and Secondhand Smoke Exposure	Smoke-free policies	Nov-12	

Appendix 2: Delphi Results

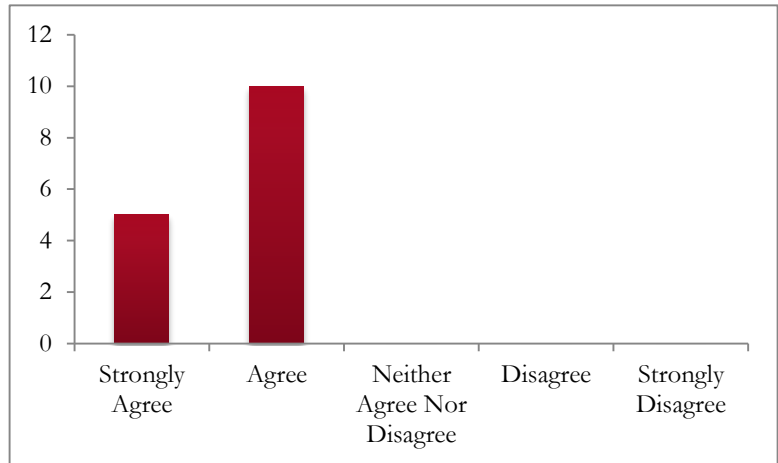
Delphi Round One Survey Questions and Response Information

Prompt

2. The text box above captures the key steps in creating a legal dataset.*

Mean	4.4
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Vote Distribution



* The full text of this prompt was derived from EVAN ANDERSON, et al., Measuring Statutory Law and Regulations for Empirical Research, in Public Health Law Research: Theory and Methods (Alexander Wagenaar & Scott Burris eds., 2013) Available at <http://ssrn.com/abstract=2021191>. The text this prompt refers to is as follows:

We have basic identified activities required for creating a credible, transparent and accurate scientific legal dataset. (These are based on EVAN ANDERSON, et al., Measuring Statutory Law and Regulations for Empirical Research, in Public Health Law Research: Theory and Methods (Alexander Wagenaar & Scott Burris eds., 2013) available at <http://ssrn.com/abstract=2021191>). We have used these to organize this questionnaire, but below we seek your amendments to these activities for Round Two.

Development and Scope: During this phase, the research team is assembled and conducts the research necessary to define the scope of the dataset, create a preliminary list of variables to be measured, and define an initial research strategy.

Systematic Collection of the Law: The collection of the law is an important and sometimes complicated step in the creation of a legal dataset. In this phase, the research team refines and revises the research strategy as necessary to ensure that all legal texts within the scope of the research are identified and collected.

Coding: In this phase, researchers complete the creation of an initial coding scheme and begin coding the law. Coding results are reviewed carefully for consistency, and the coding scheme is reviewed and revised as necessary to ensure validity.

Documentation of the Research in a Codebook and Protocol: Research and coding decisions, processes and rules are carefully recorded in a protocol. The protocol, which should always be available along with the dataset, describes the background, rationale, objectives, methodology, statistical evaluation of the data, and the overall organization of a quantitative legal dataset. The codebook describes and documents the variables, internal coding notes and coding questions asked in a quantitative legal dataset.

Dissemination: Completed legal datasets should generally be freely available to researchers and other interested users in accessible web repositories and formats

Updating: Policy Surveillance entails the monitoring of changes in law, and the timely incorporation of those changes into the dataset. New data should never replace old data, but rather changes in law should be added to create datasets that captures the attributes of the law over time.

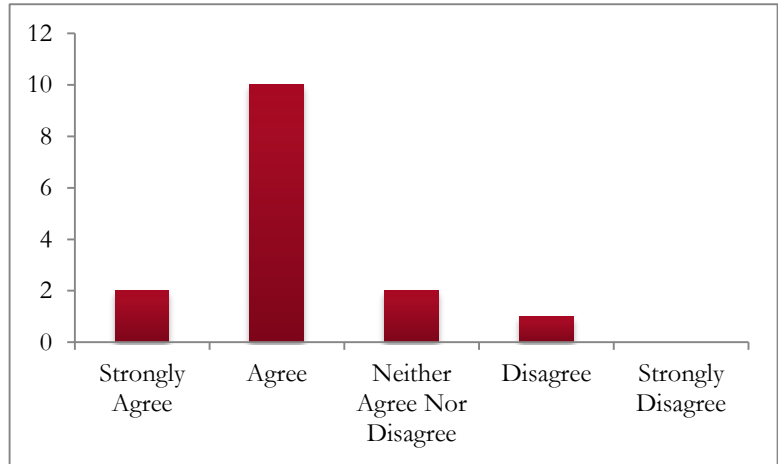
Delphi Round One Survey Questions and Response Information

Prompt

3. A legal dataset is a collection of quantitative measurements that describe the apparent features of a specified body of law across jurisdictions and/or time.

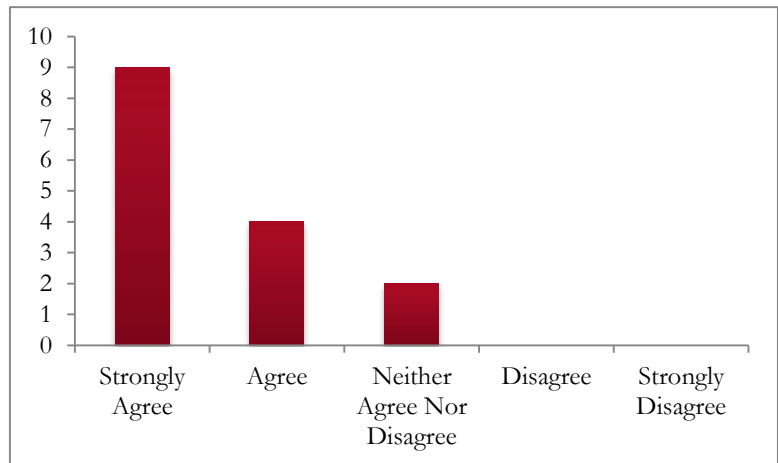
Mean	3.9
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Vote Distribution



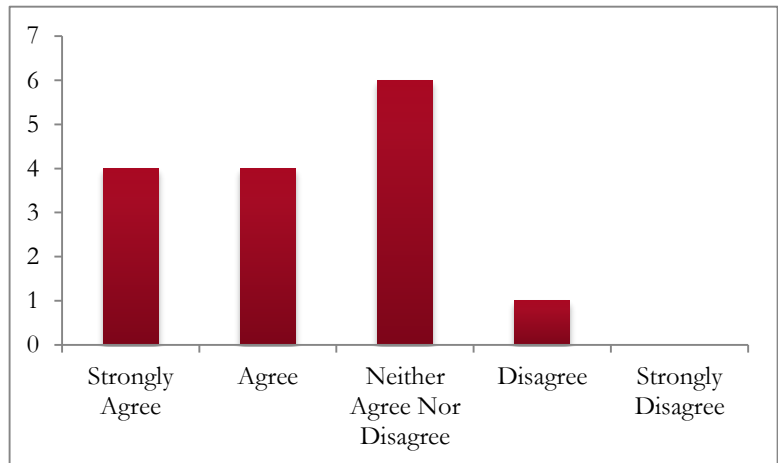
4. The scope of a legal dataset should be defined through an iterative process of research, analysis and expert consultation.

Mean	4.5
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5. The creation of a valid dataset requires at least two researchers to conduct legal research and coding.

Mean	3.6
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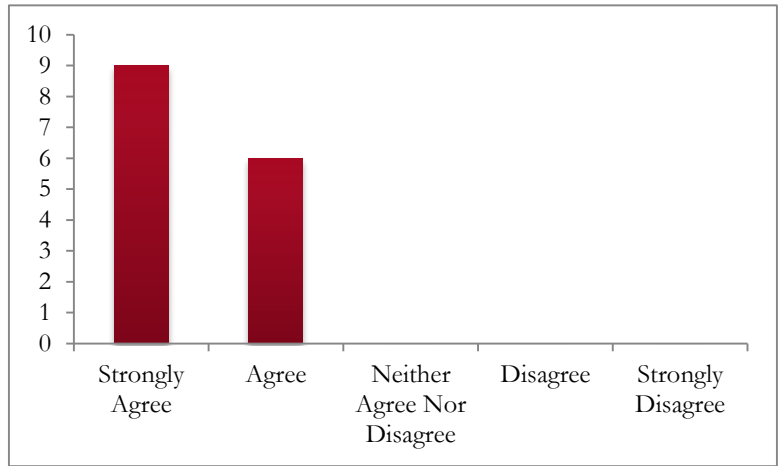
Delphi Round One Survey Questions and Response Information

Prompt

6. A domain expert should be consulted to help define the scope of the dataset.

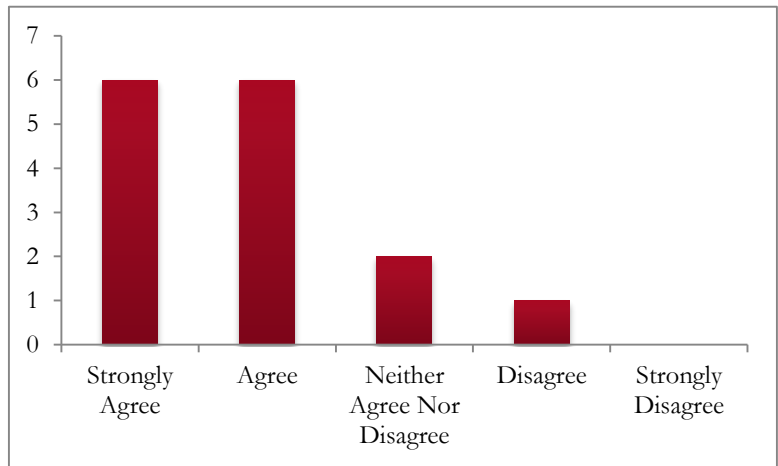
Mean 4.4

Vote Distribution



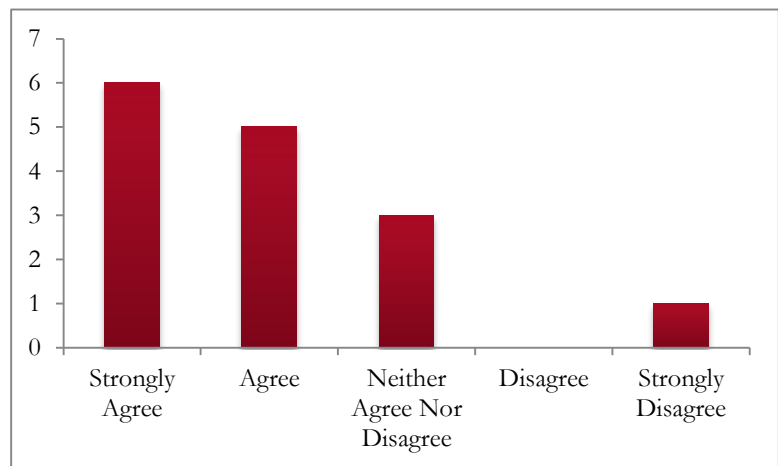
7. A domain expert should have a sophisticated professional understanding of the law being collected.

Mean 4.1



8. A domain expert should understand the health problem the law is trying to address.

Mean 3.8



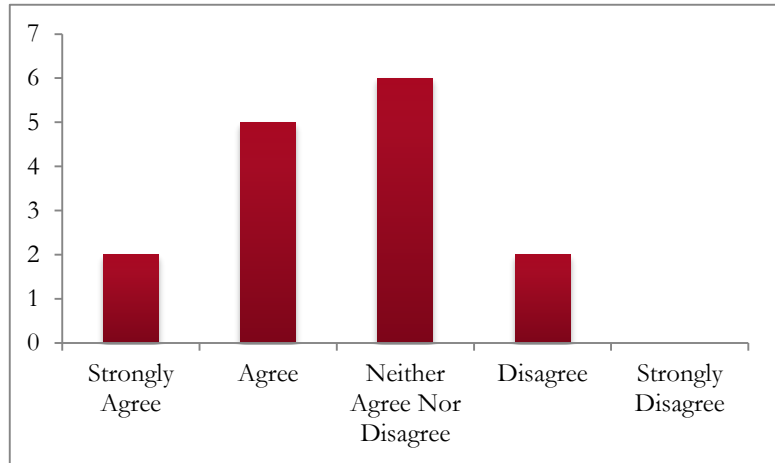
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

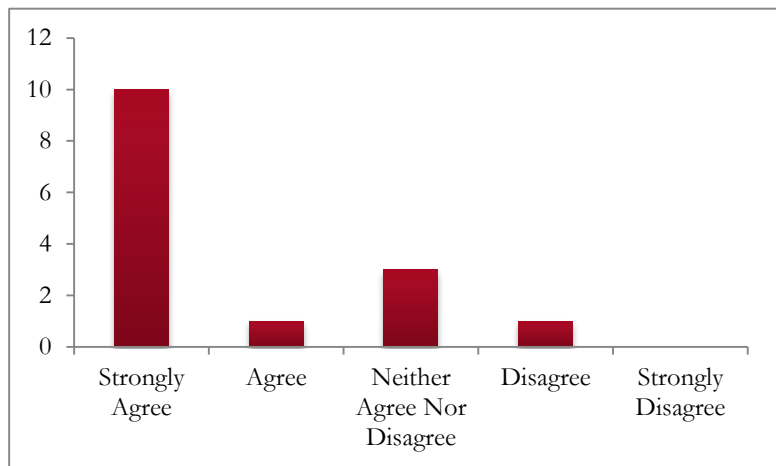
9. A domain expert should understand how the law to be measured is being implemented.

Mean 3.4



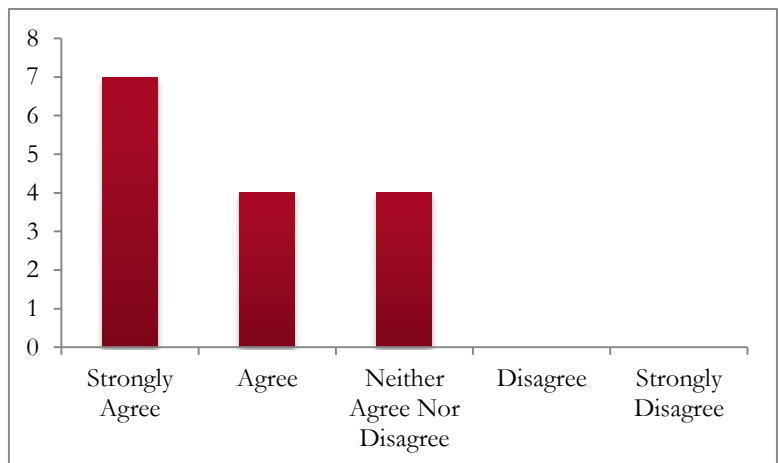
10. Reliable legal research for policy surveillance requires the use of multiple search strategies.

Mean 4.4



11. Reliable legal research for policy surveillance requires redundant research.

Mean 4.1



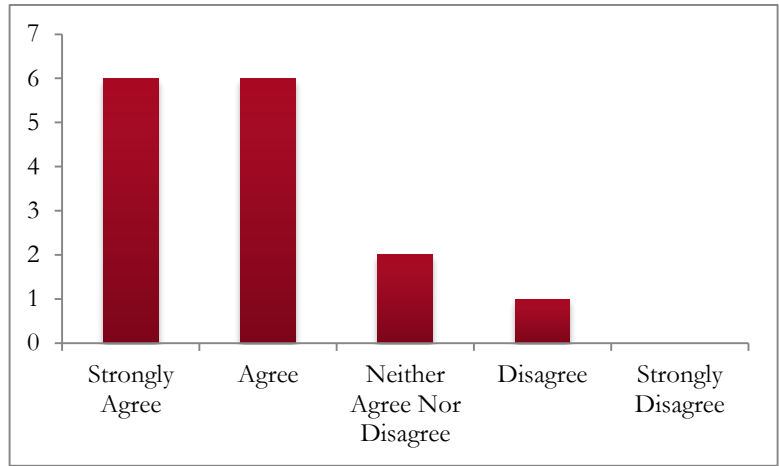
Delphi Round One Survey Questions and Response Information

Prompt

12. Research should be conducted with 100% redundancy and subject to timely review until the research strategy and each researcher are returning consistent results. “Redundancy” in this context means that at least two researchers collect (or, later, code) the law from the same jurisdiction, so that two versions of the same research or coding record are created for comparison.

Mean	4
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Vote Distribution



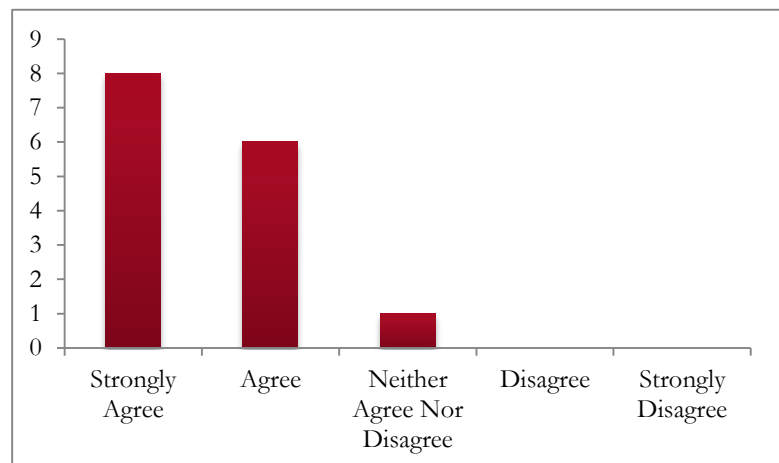
13. What proportion of jurisdictions/time periods should be redundantly researched to assure reliable research results?

Mean	n/a
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The answers for this question have been omitted as the responses were in narrative format.

14. Continuous review of the accuracy of legal research is essential for an accurate legal dataset.

Mean	4.4
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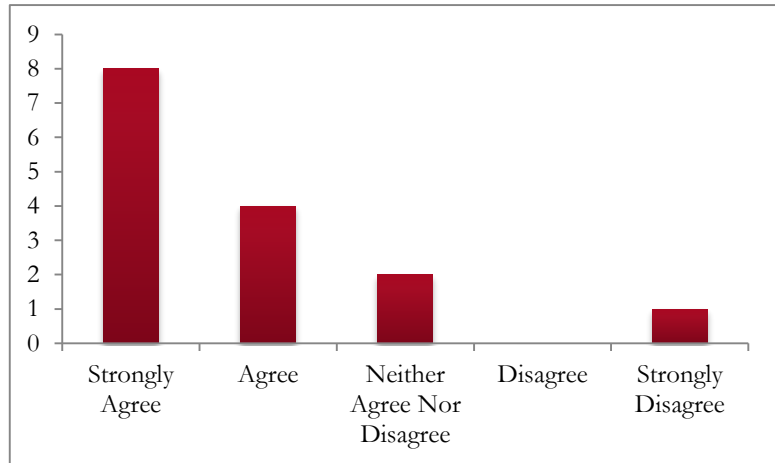
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

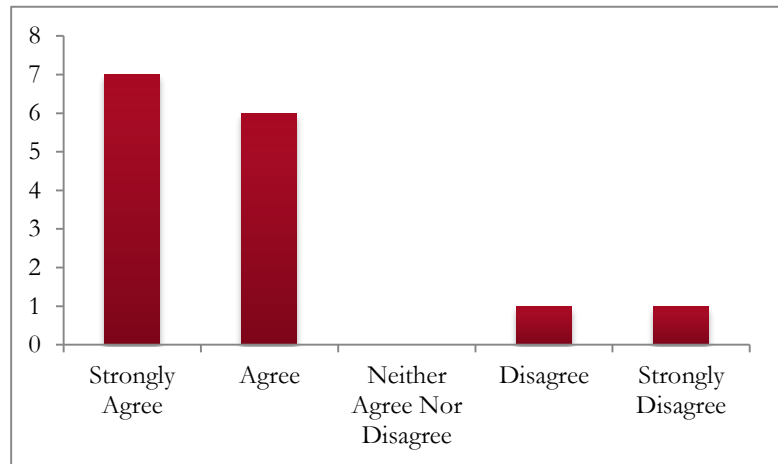
15. Reliable legal research requires recording all search elements.

Mean	4.3
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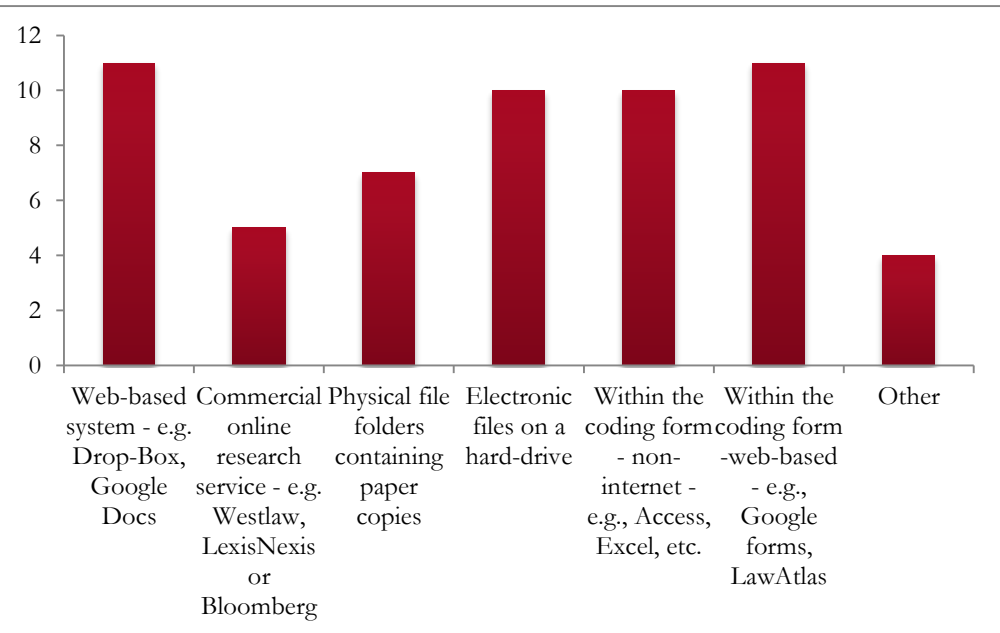
16. Reliable legal research requires legal text to be collected and retained in a readily accessible, organized record system.

Mean	4.2
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17. Which of these methods constitute a readily accessible, organized ways to retain legal text:

Mean	n/a
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Delphi Round One Survey Questions and Response Information

Prompt

18. Which of the options above is the best choice?

Mean	n/a
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19. Reliable legal coding for policy surveillance requires redundant coding.

Mean	4.3
------	-----

20. Coding should be conducted with 100% redundancy and subject to timely review until scheme and each coder are returning consistent results.

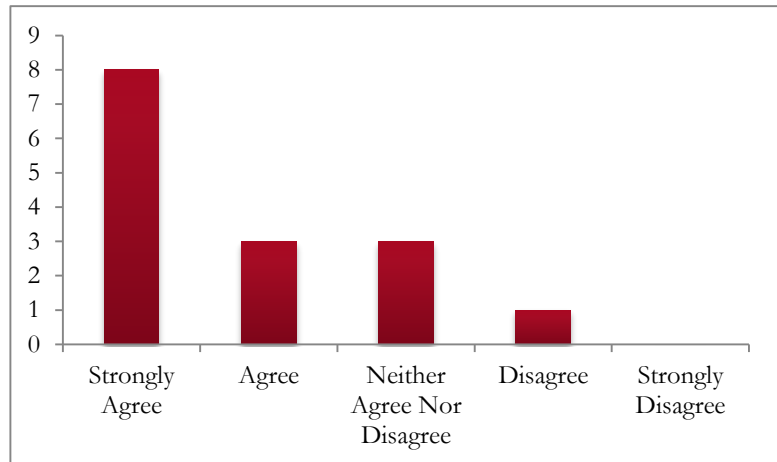
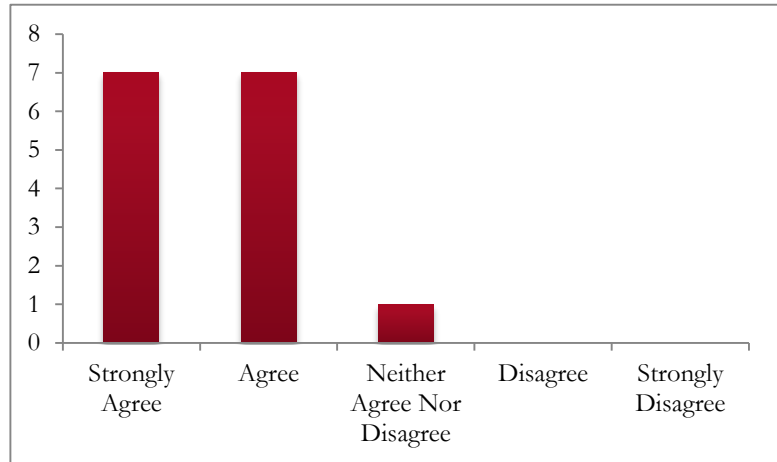
Mean	4.1
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21. What proportion of jurisdictions/time periods should be redundantly coded to assure reliable coding results?

Mean	n/a
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Vote Distribution

The answers for this question have been omitted as the responses were in narrative format.



The answers for this question have been omitted as the responses were in narrative format.

Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

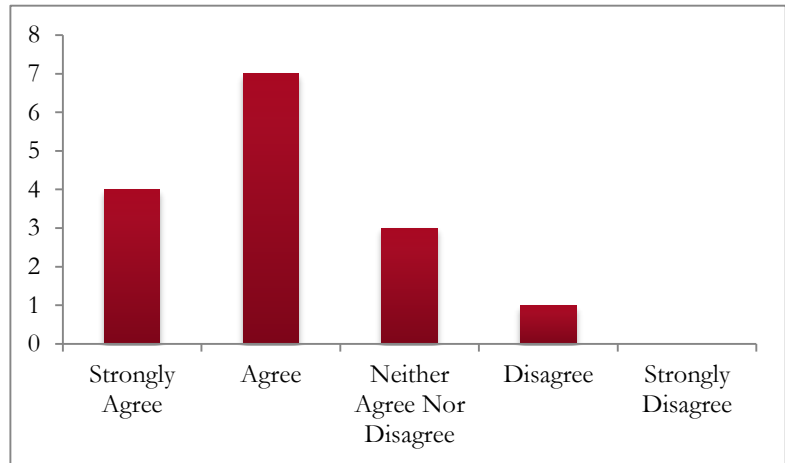
22. Which of the options above would you consider as the best choice?

Mean	n/a
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The answers for this question have been omitted as the responses were in narrative format.

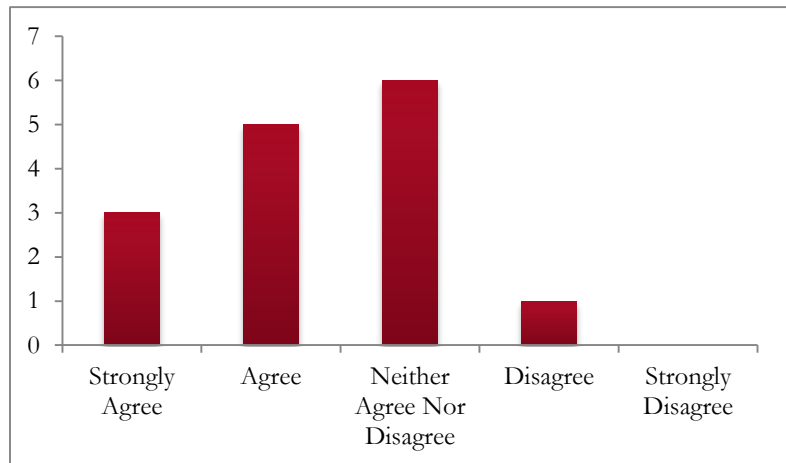
23. Coding using software is superior in reliability to pencil and paper coding.

Mean	4
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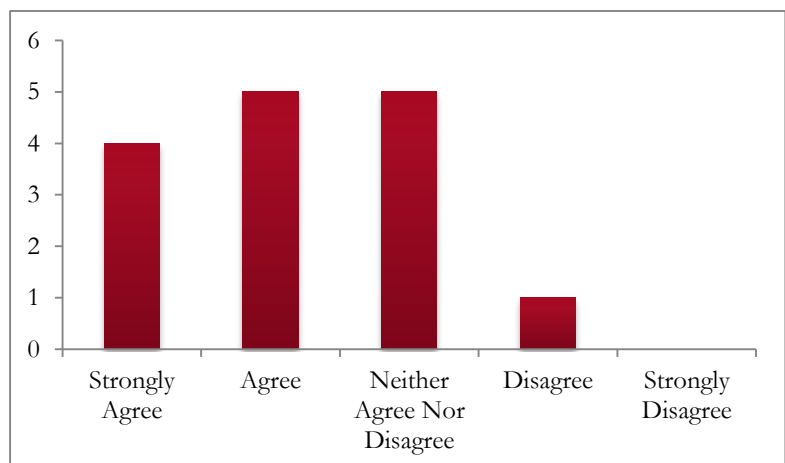
24. Coding using a form is superior in reliability to directly entering coding data in a spreadsheet.

Mean	3.7
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25. It is important that the coding platform allows legal text and coding questions to be displayed on the same screen.

Mean	3.7
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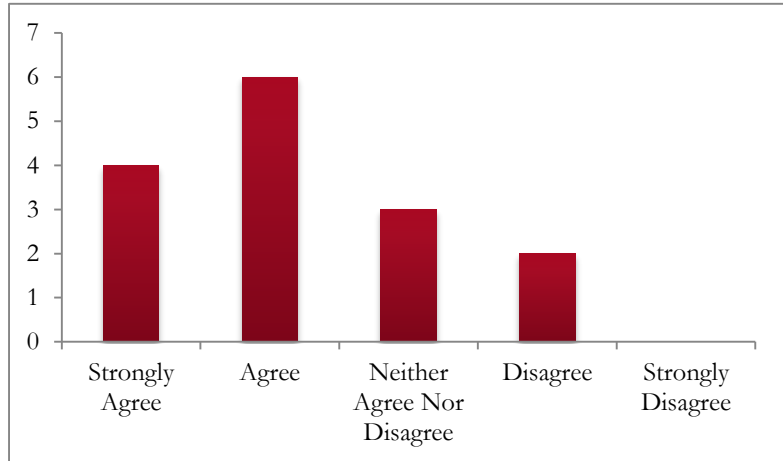
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

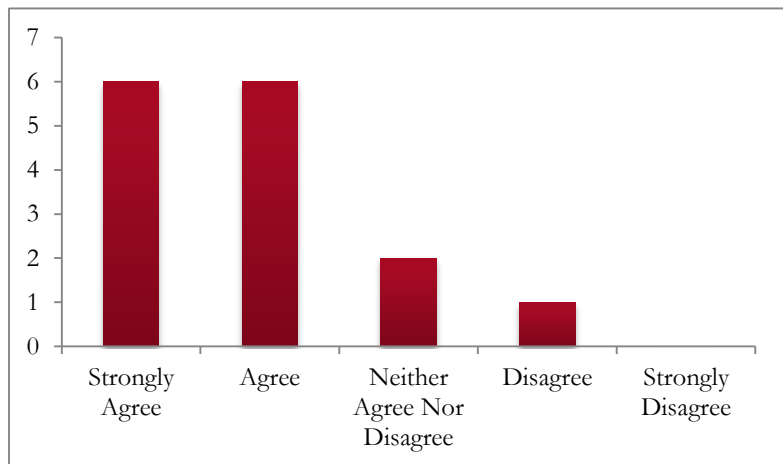
26. It is important that the coding platform allows simultaneous coding by two or more researchers.

Mean 3.8



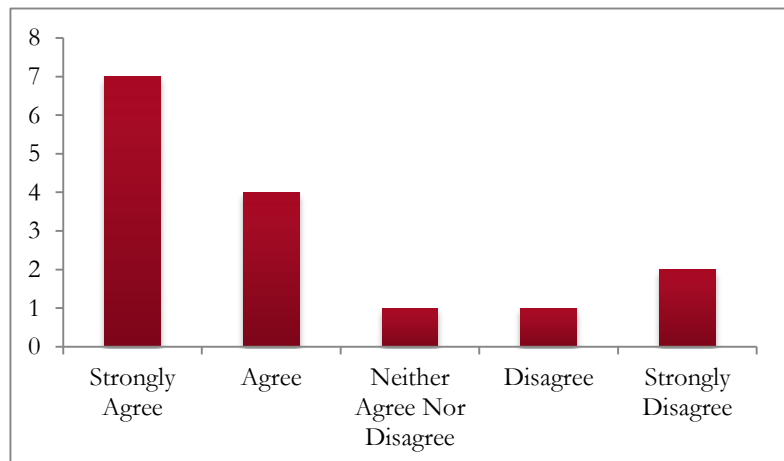
27. A legal dataset must capture the effective date of the legal text.

Mean 4.2



28. A legal dataset must capture the FIPS code for the jurisdiction.

Mean 3.8



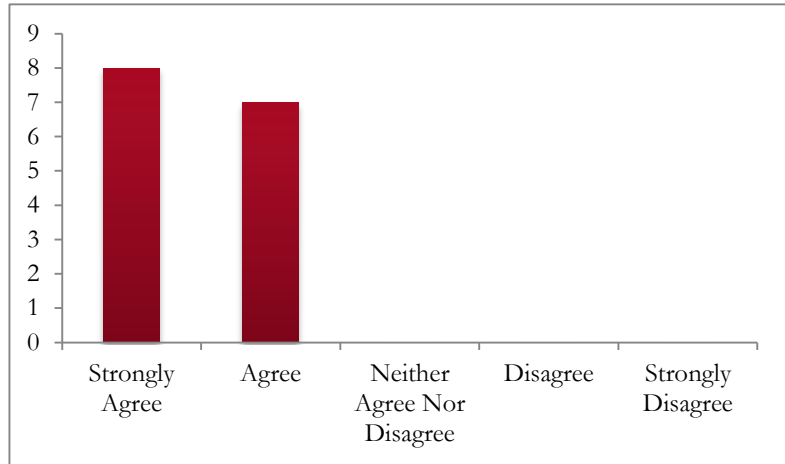
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

29. Continuous review of the accuracy of coding is essential for an accurate legal dataset.

Mean	4.5
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30. How frequently should coding be reviewed by a supervisor for errors or inconsistencies?

Mean	n/a
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The answers for this question have been omitted as the responses were in narrative format.

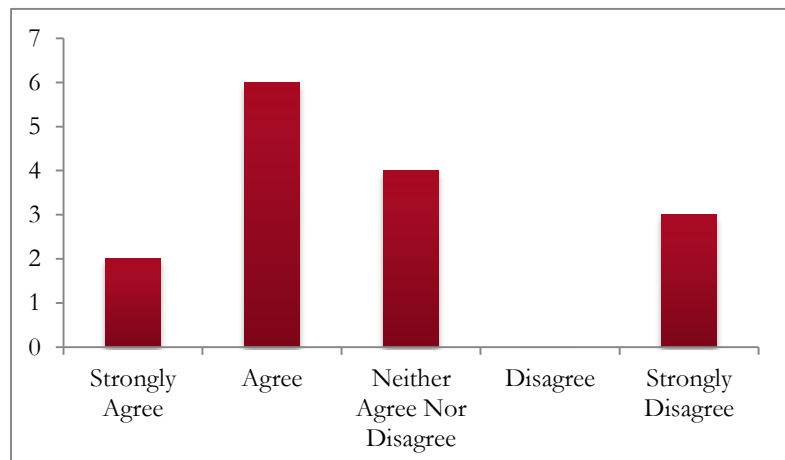
31. Which of the options above would you consider as the best choice?

Mean	n/a
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The answers for this question have been omitted as the responses were in narrative format.

32. Recoding of a sample of records by a naive coder at the end of the coding process is an essential quality control step.

Mean	3.2
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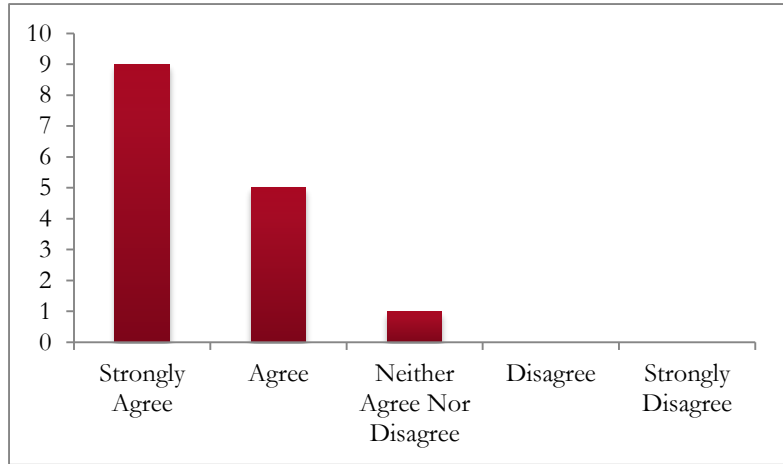
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

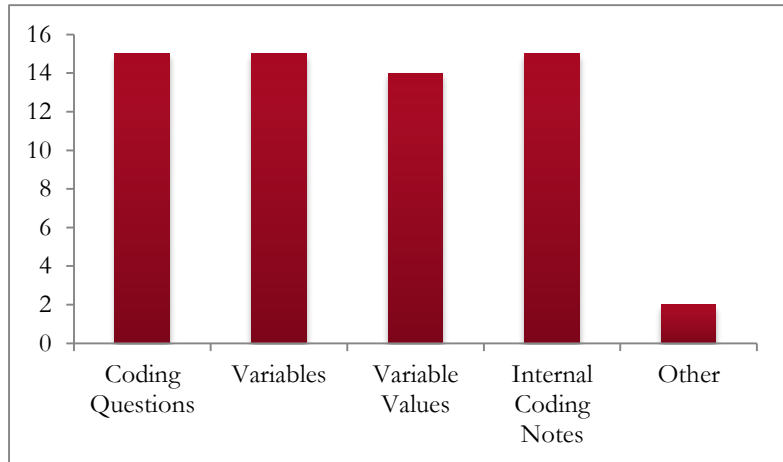
33. A codebook must accompany every completed legal dataset.

Mean	4.6
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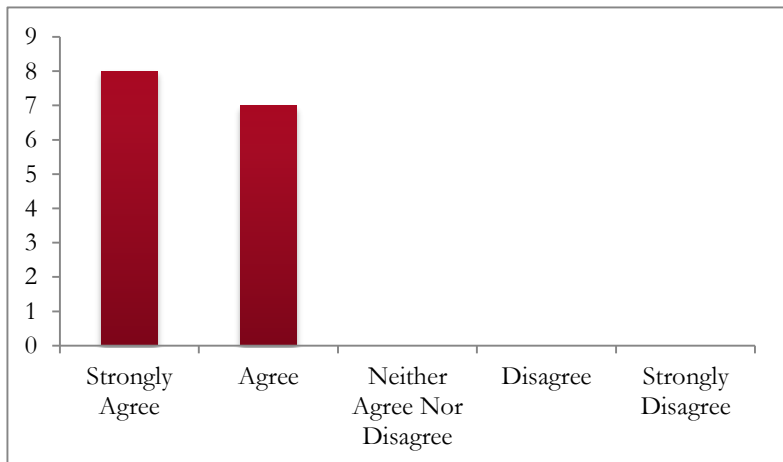
34. A codebook must have the following components.

Mean	n/a
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35. A protocol must accompany every completed legal dataset.

Mean	4.6
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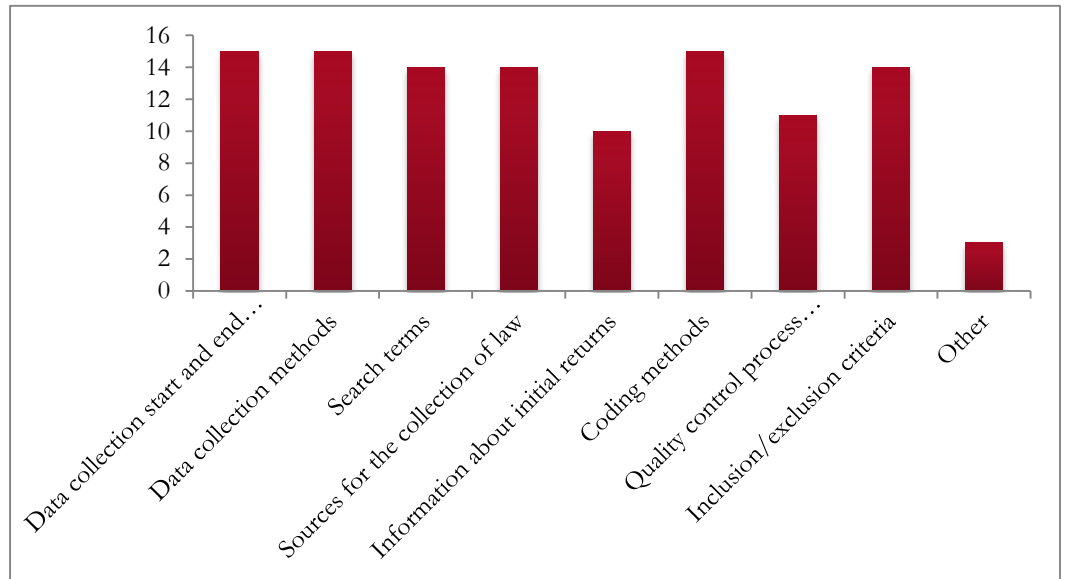
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

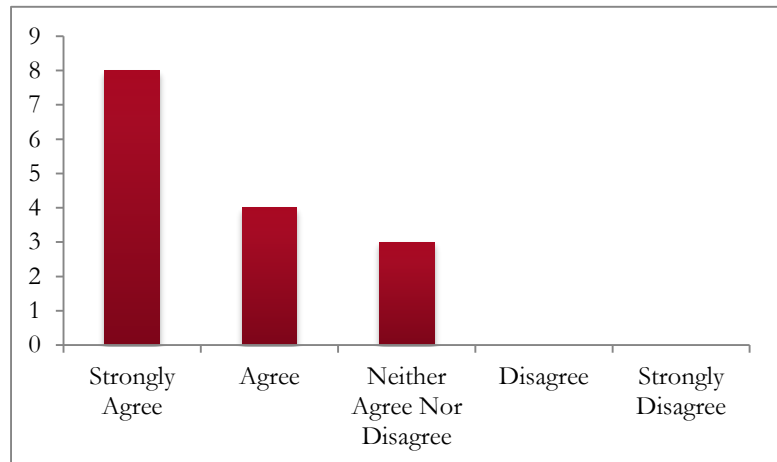
36. A protocol must provide the following information:

Mean	n/a
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37. Ordinarily, datasets funded by public agencies and foundations should be available to users under a Creative Commons or similar license allowing free use for research and other public-interest purposes.

Mean	4.3
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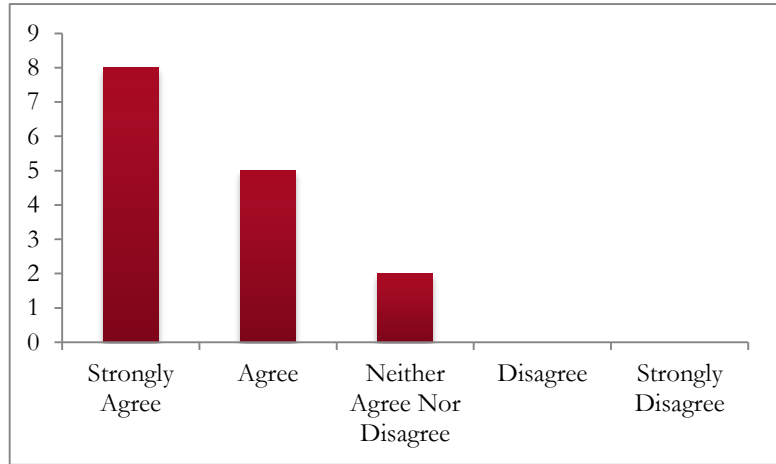
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

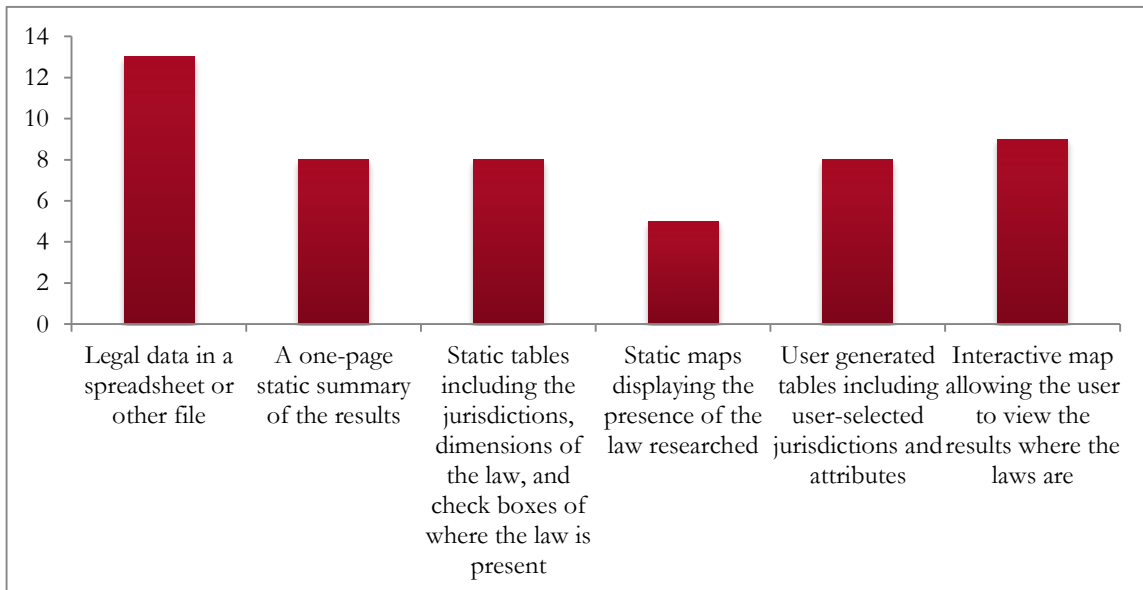
38. Policy surveillance findings should be available to the public on the World Wide Web.

Mean	4.3
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39. Which of these are essential for the effective dissemination of a legal dataset on a website?

Mean	n/a
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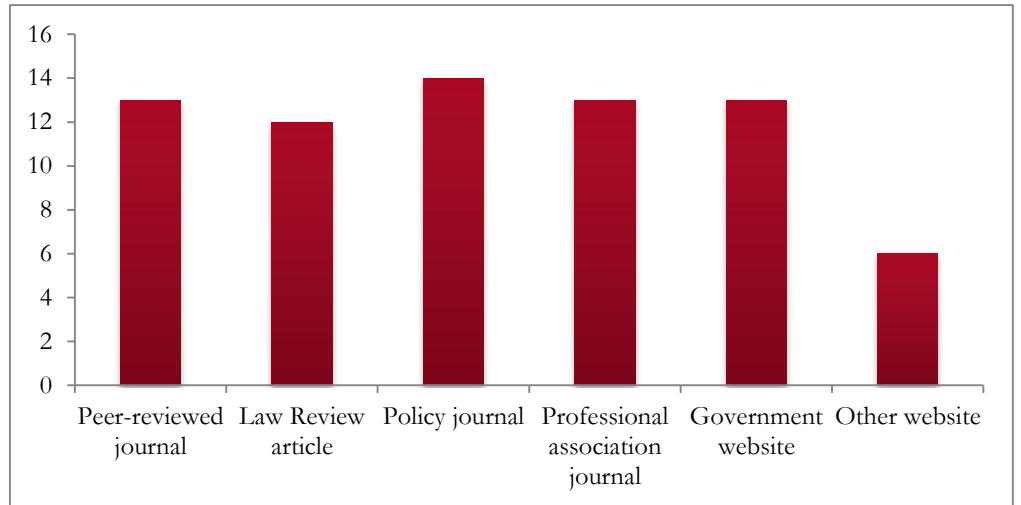
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

40. Which of the following is useful for publication?

Mean	n/a
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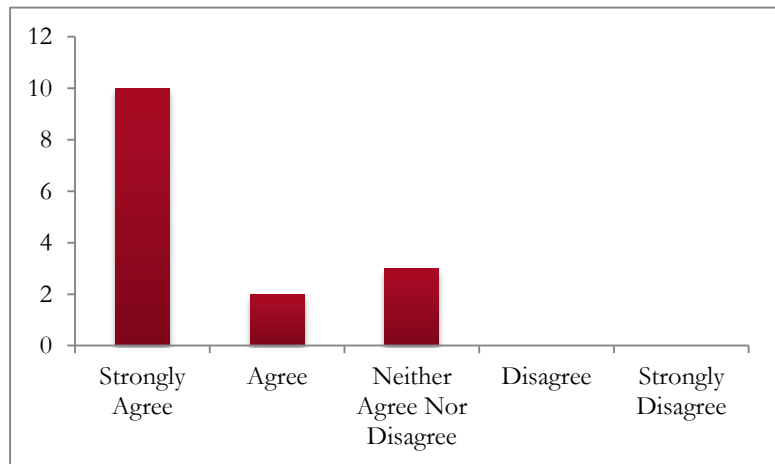
41. Please identify your top two choices from the list above.

Mean	n/a
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The answers for this question have been omitted as the responses were in narrative format.

42. It is essential for policy surveillance data to be kept current.

Mean	4.5
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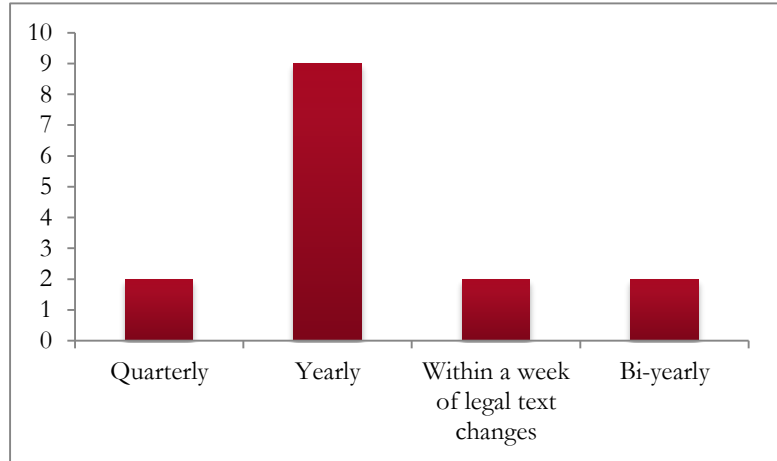
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

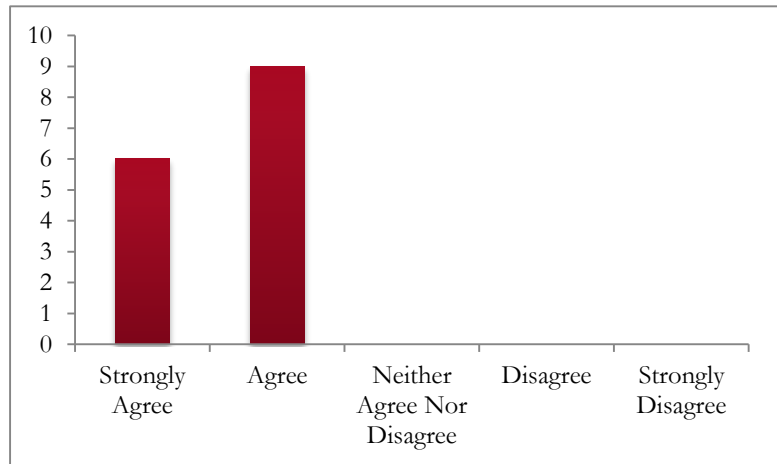
43. How often should a dataset be updated?

Mean	n/a
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44. The same research and coding procedures that were used to create the dataset should be followed for updating.

Mean	4.4
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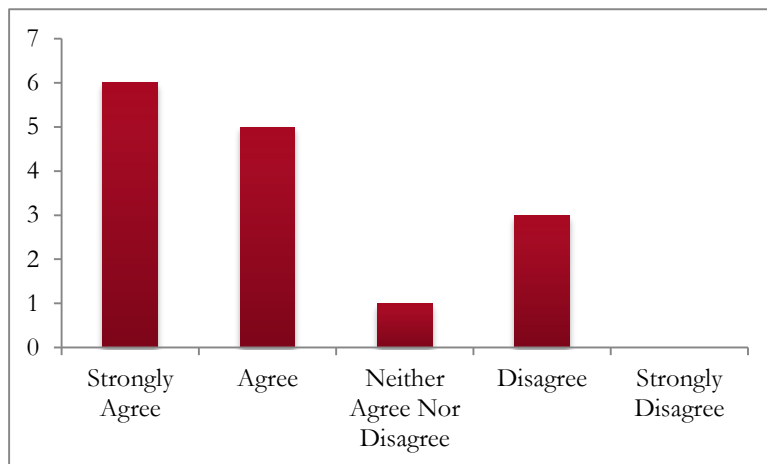
Delphi Round One Survey Questions and Response Information

Prompt

2 (repeated) A legal dataset is a collection of quantitative measurements that describe the apparent features of a specified body of law across jurisdictions and/or time. For the purposes of this item, we understand that every form of classification involves some interpretation. It is unlikely all interpretive elements can be removed. However, policy surveillance does not seek to answer legal questions in a way that applies law to previously unanswered factual circumstances. In light of this knowledge, please re-evaluate the below item and vote on your agreement.

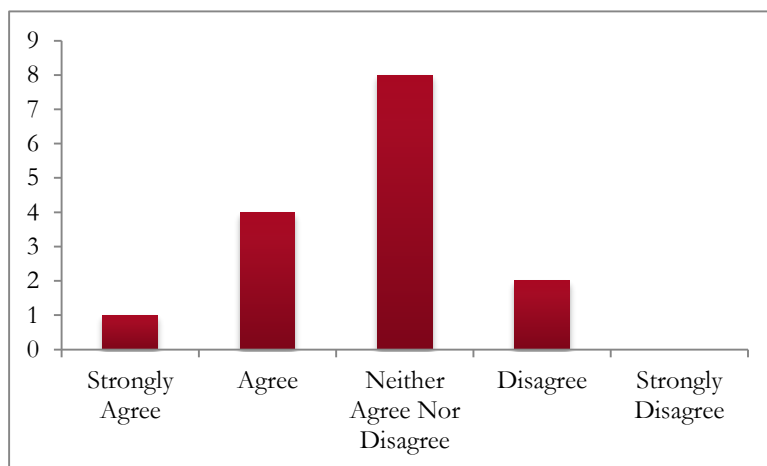
Mean	3.9
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Vote Distribution



3a (new) A domain expert should be independent and external to the research team creating a legal dataset.

Mean	3.2
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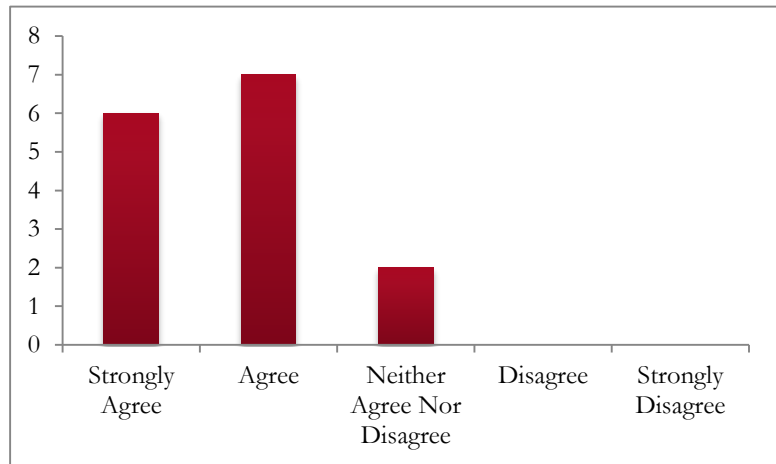
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

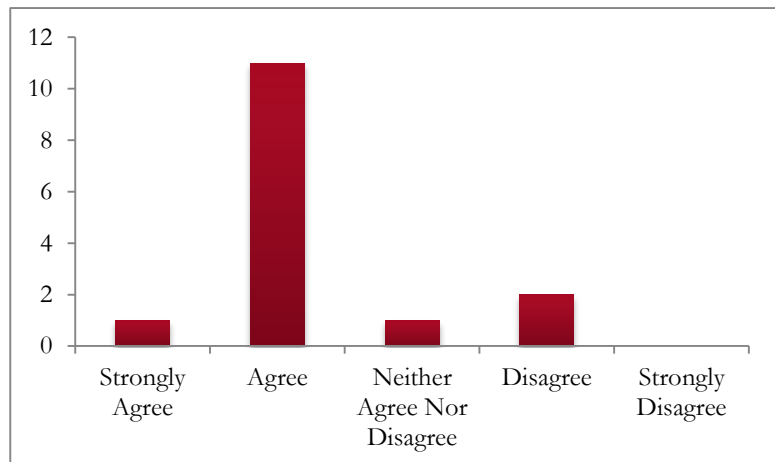
3b (new) More than one expert may be needed to create a legal dataset.

Mean 4.2



4 (new) A domain or content expert will normally, but not always, be a lawyer with a sophisticated professional understanding of the law being collected.

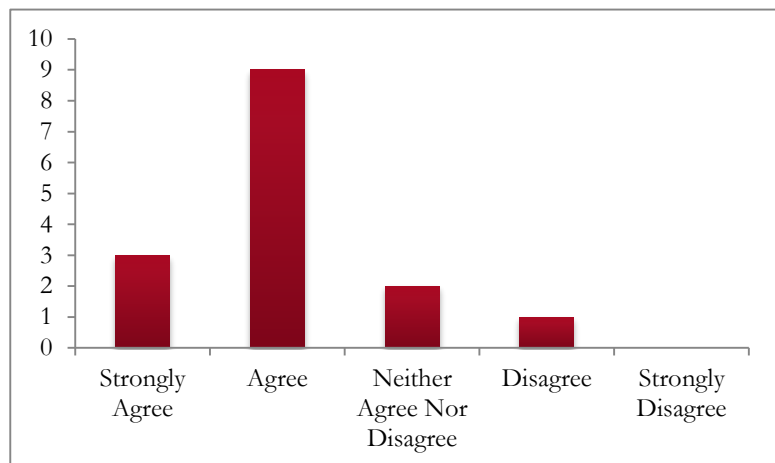
Mean 3.7



5 (repeated) A domain expert should understand the health problem the law is trying to address.

[Prompt reproduced with comments from Delphi round one.]

Mean 3.9

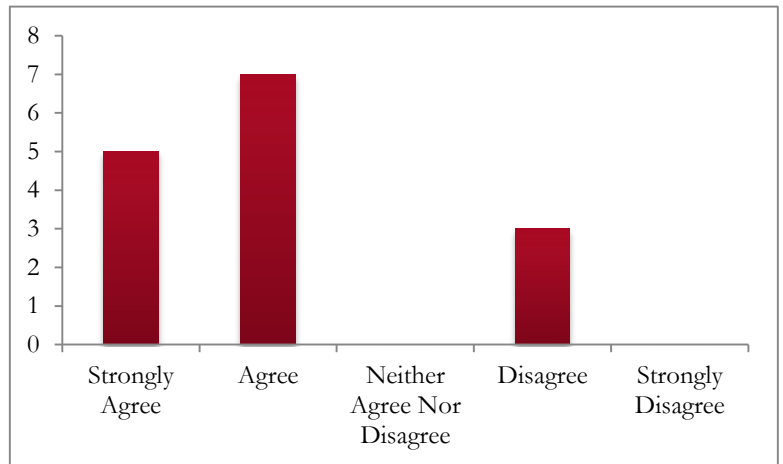


Prompt

Vote Distribution

6 (new) A domain expert who understands how the law to be measured is being implemented is desirable because he or she will be able to pick elements of the law most important for evaluation. To clarify, implementation of the law is not a traditional focus of policy surveillance, meaning implementation is not typically measured in the same way features of laws across jurisdictions and time are measured. Please consider this when responding.

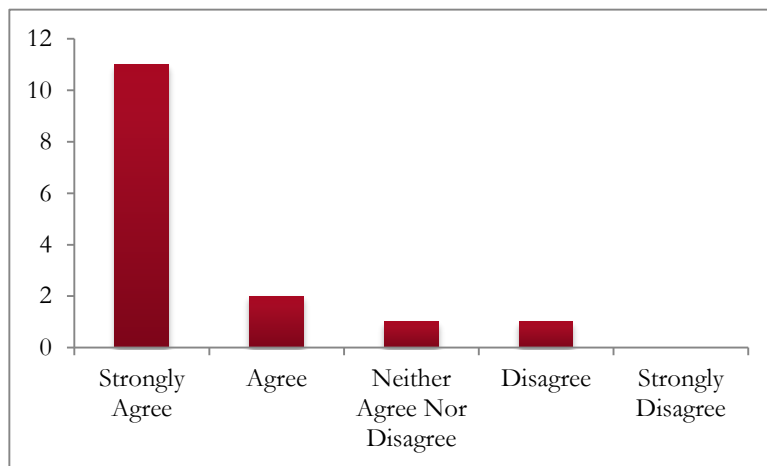
Mean	3.9
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Prompt

Vote Distribution

7 (repeated) Reliable legal research for policy surveillance requires the use of multiple search strategies. For the purposes of this item, we define "search strategies" as independent methods of searching for legal text. Different search strategies include keyword searches in a legal database, searching in a legal text's table of contents, or using secondary sources to identify laws. Conducting multiple keyword searches in different databases would be an example of one search strategy employed over multiple databases instead of multiple search strategies. Please consider this when responding below. *[Prompt reproduced with comments from Delphi round one.]*



Mean	4.5
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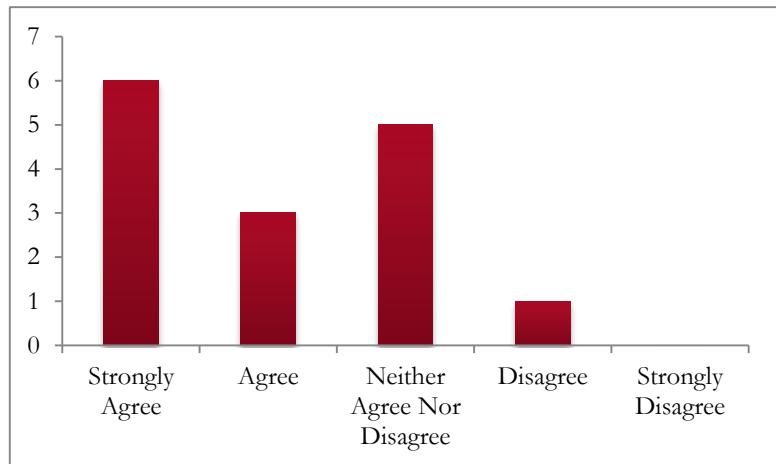
Delphi Round One Survey Questions and Response Information

Prompt

8 (new) Research should be conducted with 100% redundancy and subject to timely review until the research strategy and each researcher are returning consistent results. “Redundancy” in this context means that at least two researchers collect the law from the same jurisdiction, so that two versions of the same research are created for comparison.

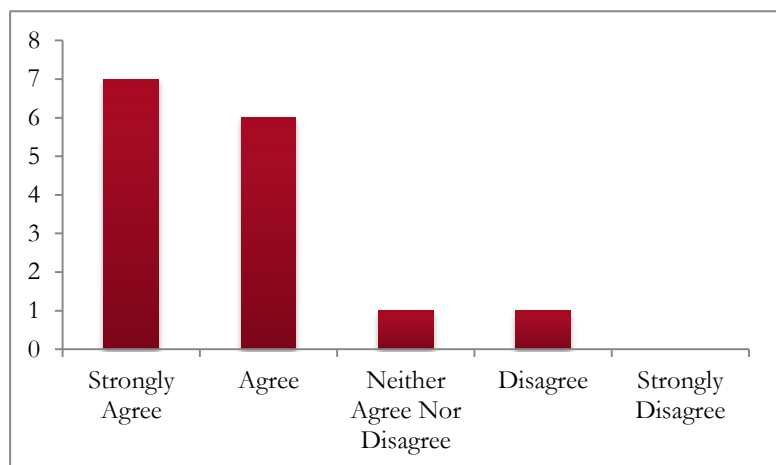
Mean 3.9

Vote Distribution



9a (new) Do you agree that there should be an explicit plan for quality control when conducting research? For example, at PHLR, we conduct 100% redundant research until 95% of all redundant research is consistent with the original research. Once this is achieved, 20% of additional research is redundantly researched by another person unless the consistency drops below 95%.

Mean 4.2



Delphi Round One Survey Questions and Response Information

Prompt

9b (new) In the following box, please describe your ideal quality control method to ensure consistent, accurate research.

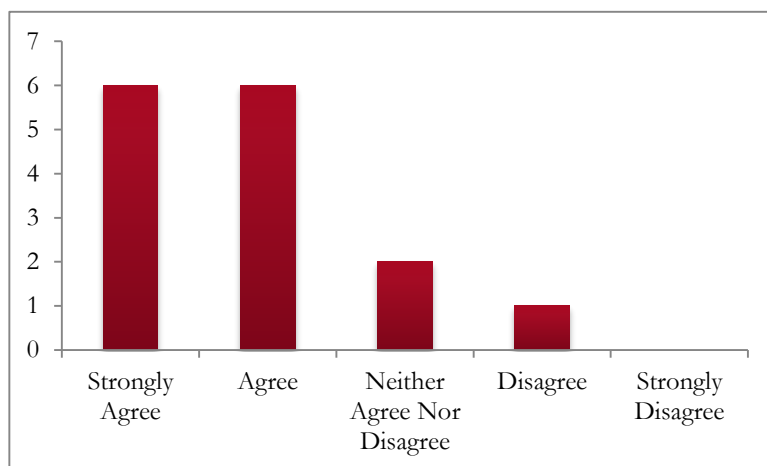
Mean	n/a
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10 (repeated) Coding should be conducted with 100% redundancy and subject to timely review until scheme and each coder are returning consistent results. For the purposes of policy surveillance, the act of "coding" refers to the application of a set of questions developed with the help of an expert to a jurisdiction's legal text. These questions are also referred to as a "coding scheme" because they are answered by the coder as he or she reads the statutes in any given entry for a legal dataset. Please consider this as you respond to the item below. *[Prompt reproduced with comments from Delphi round one.]*

Mean	4.1
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Vote Distribution

The answers for this question have been omitted as the responses were in narrative format.



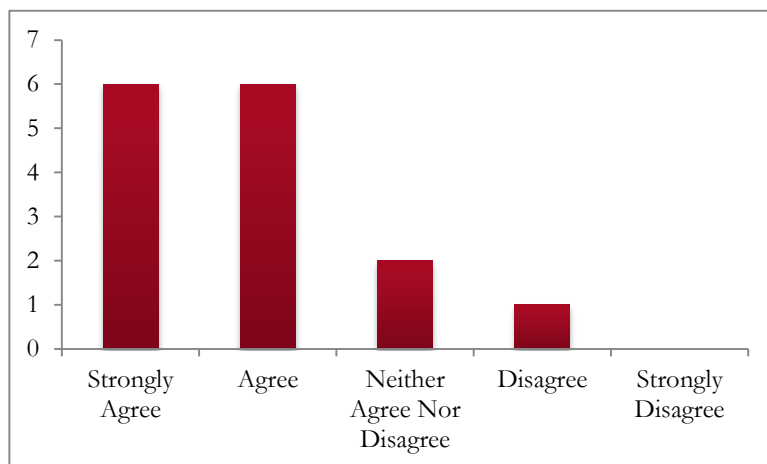
Delphi Round One Survey Questions and Response Information

Prompt

11a (new) Do you agree that there should be an explicit plan for quality control when coding legal data? For example, at PHLR, we conduct 100% redundant coding of legal data until 95% of all redundant coding is consistent with the original coding. Once this is achieved, 20% of additional original coding is redundantly coded by another person unless the consistency drops below 95%.

Mean	4.1
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Vote Distribution



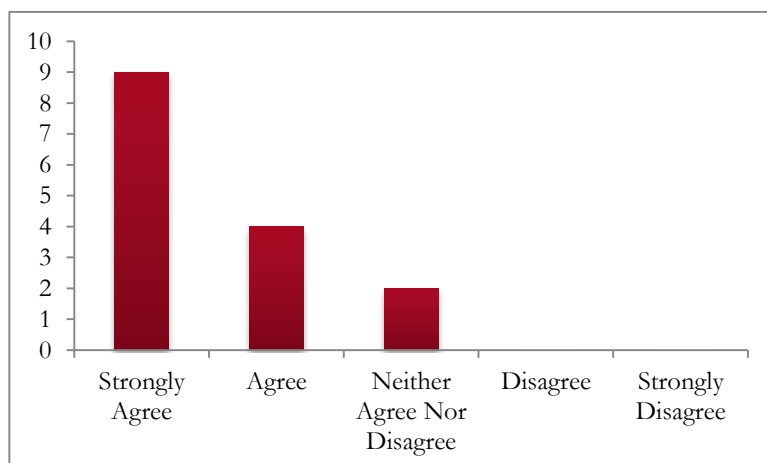
11b (new) In the following box, please describe your ideal quality control method to ensure consistent, accurate coding of legal data.

Mean	n/a
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The answers for this question have been omitted as the responses were in narrative format.

12 (new) Replicable and transparent legal research requires recording all search terms and keywords, number of search results, specific databases searched, and exclusion and inclusion criteria.

Mean	4.5
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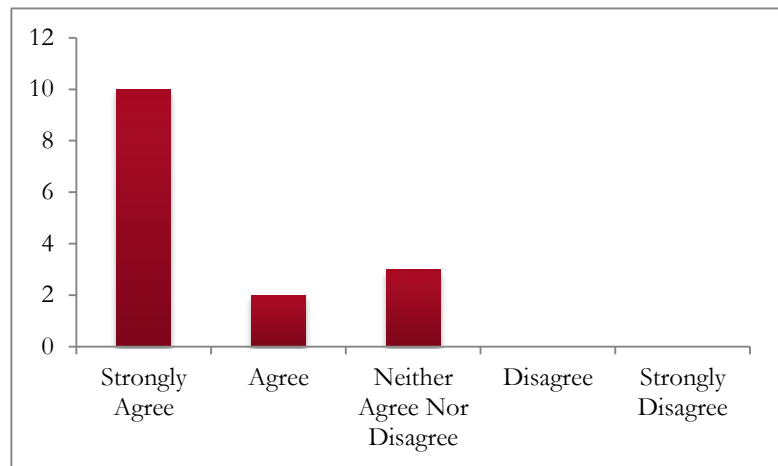
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

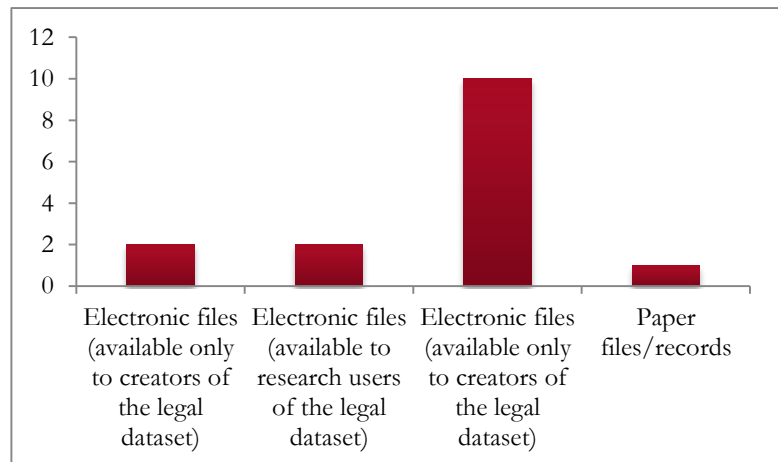
13 (new) Replicable and transparent legal research requires legal text to be collected and retained in a readily accessible, organized record system.

Mean 4.5



14 (new) What should be the standard practice for the availability of the original legal texts that were gathered?

Mean n/a



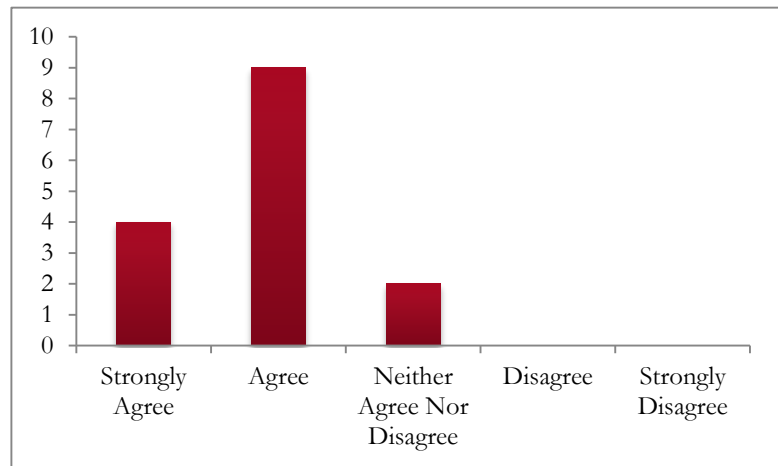
Delphi Round One Survey Questions and Response Information

Prompt

15 (repeated) Coding using software is superior in reliability to pencil and paper coding. For the purposes of policy surveillance, the act of "coding" refers to the application of a set of questions developed with the help of an expert to a jurisdiction's legal text. These questions are also referred to as a "coding scheme" because they are answered by the coder as he or she reads the statutes in any given entry for a legal dataset. Please consider this as you answer the question below. *[Prompt reproduced with comments from Delphi round one.]*

Mean	4.1
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Vote Distribution



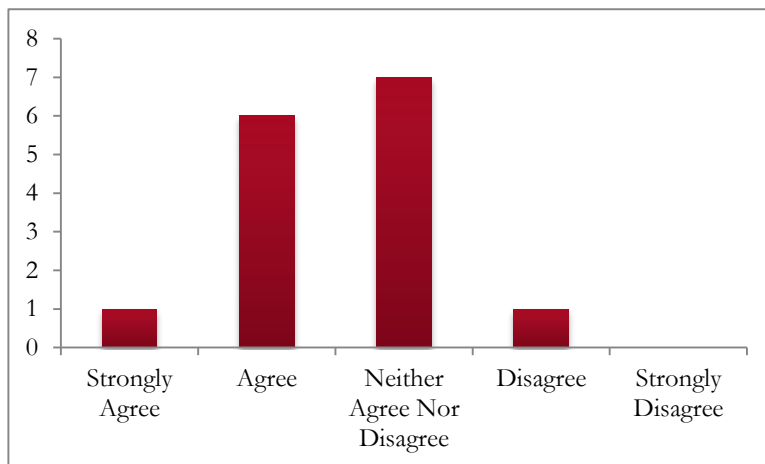
Delphi Round One Survey Questions and Response Information

Prompt

16 (repeated) Coding using a form is superior in reliability to directly entering coding data in a spreadsheet. For the purposes of policy surveillance, the act of "coding" refers to converting elements of the law into variables. "Coding using a form" allows a specified range of answers and limits the coder to only one jurisdiction at a time. Please consider this as you answer the item below.
[Prompt reproduced with comments from Delphi round one.]

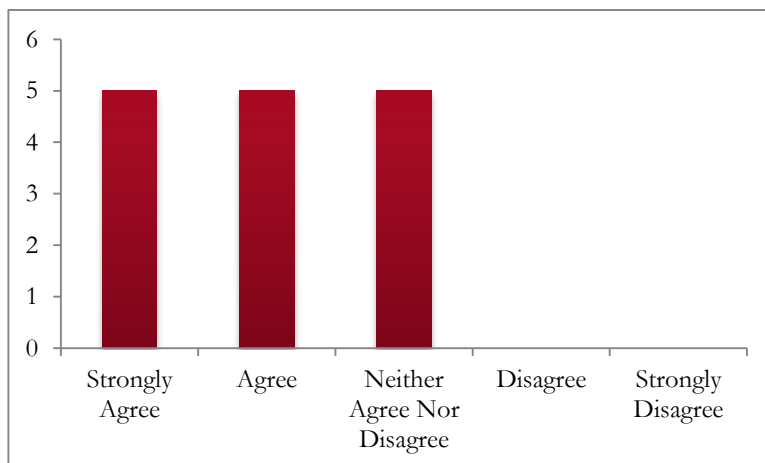
Mean	3.5
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Vote Distribution



17 (new) It is useful or desirable that the coding form (if electronic) allows legal text and coding questions to be displayed on the same screen.

Mean	4
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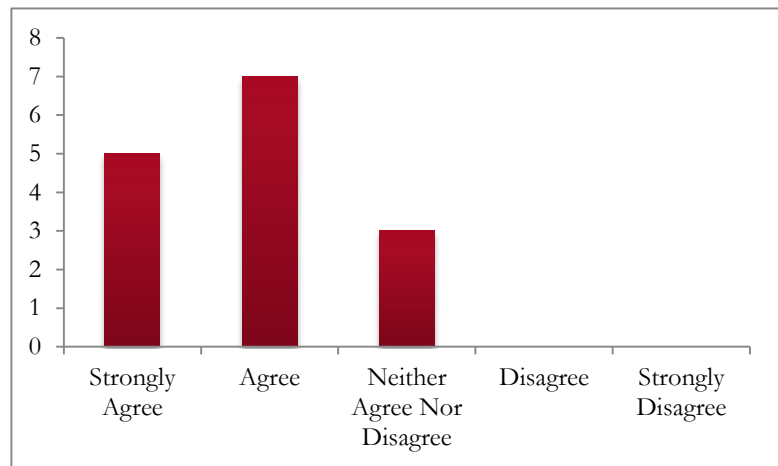
Delphi Round One Survey Questions and Response Information

Prompt

18 (new) It is useful or desirable that the coding platform (if electronic) allows simultaneous coding by two or more researchers so that redundant coding or other simultaneous use can be achieved without manually merging different files.

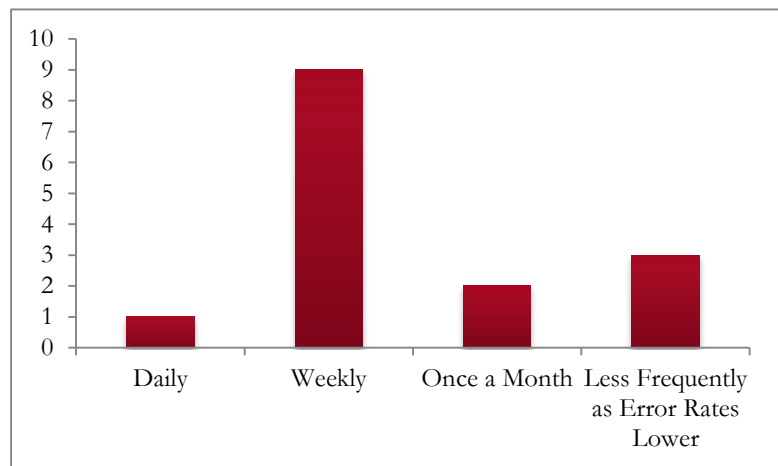
Mean 4.1

Vote Distribution



19 (repeated) How frequently should coding be reviewed by a supervisor for errors or inconsistencies?

Mean n/a



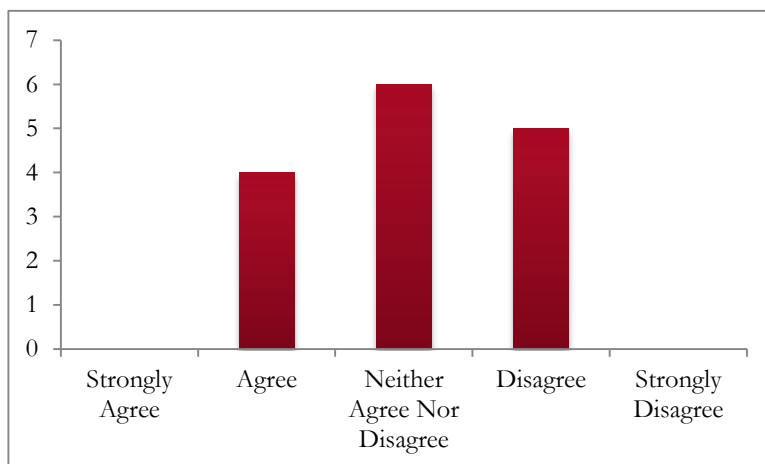
Delphi Round One Survey Questions and Response Information

Prompt

20a (new) Recoding of a sample of records by a naive coder at the end of the coding process is an essential quality control step because it is a final check of the data. For the purposes of this item, a "naive coder" is a person with legal training and policy surveillance coding experience with no prior exposure to the coding scheme or legal dataset that he or she is conducting naive coding on.

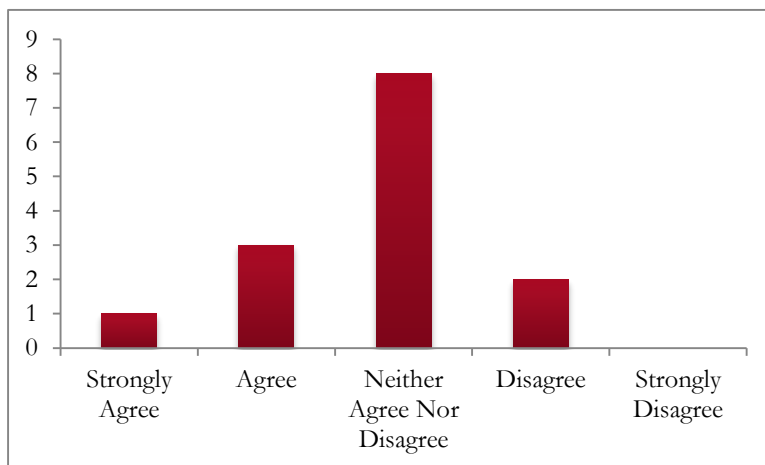
Mean 2.9

Vote Distribution



20b (new) Recoding of a sample of records by a naive coder at the end of the coding process is an essential quality control step because it verifies that there are no problems with questions in the coding scheme. For the purposes of this item, a "naive coder" is a person with legal training and policy surveillance coding experience with no prior exposure to the coding scheme or legal dataset that he or she is conducting naive coding on.

Mean 3.3



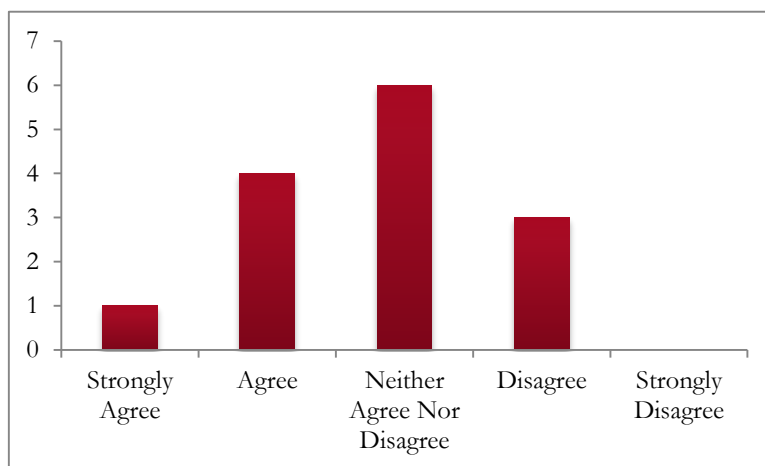
Delphi Round One Survey Questions and Response Information

Prompt

20c (new) Recoding of a sample of records by a naive coder at the end of the coding process is an essential quality control step because it serves as a final way to find issues which may have been missed in previous redundant coding review meetings or spot-checks. For the purposes of this item, a "naive coder" is a person with legal training and policy surveillance coding experience with no prior exposure to the coding scheme or legal dataset that he or she is conducting naive coding on.

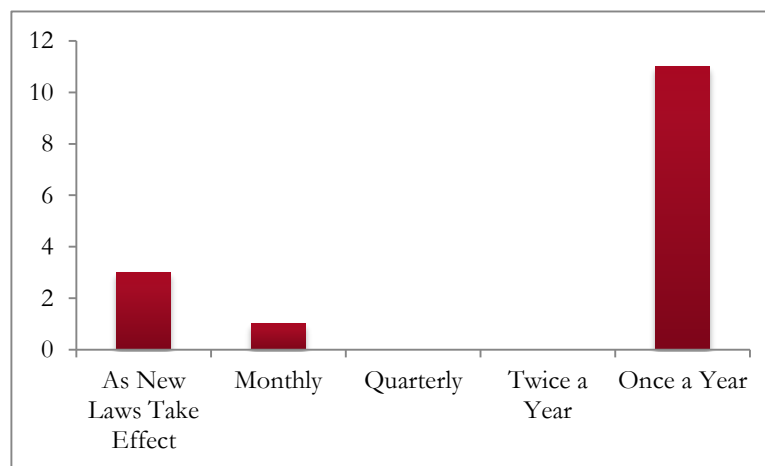
Mean	3.3
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Vote Distribution



21 (repeated) How often should a dataset be updated? *[Prompt reproduced with comments from Delphi round one.]*

Mean	n/a
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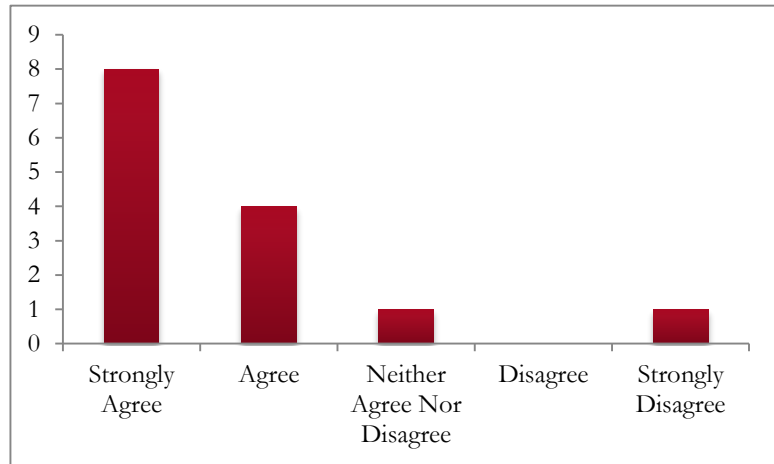
Delphi Round One Survey Questions and Response Information

Prompt

Vote Distribution

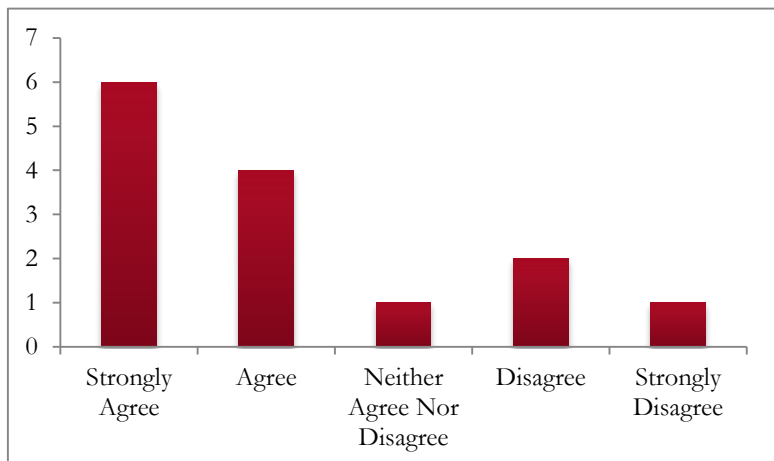
22 (repeated) A legal dataset must capture the effective date of the legal text. *[Prompt reproduced with comments from Delphi round one.]*

Mean	4.3
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Item 23 (repeated) A legal dataset must capture the FIPS code for the jurisdiction. A FIPS code is a standard identifier of geography that allows one geocoded dataset to be merged with another geocoded dataset. *[Prompt reproduced with comments from Delphi round one.]*

Mean	3.9
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References

1. Frieden TR. Government's role in protecting health and safety. *N Engl J Med*. May 16 2013;368(20):1857-1859.
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